## FEI COMPANY 2002 ANNUAL REPORT

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# BUILD VALUE

MOVING FUTURE FORW

## FEI COMPANY

#### FINANCIAL HIGHLIGHTS

supplier of Structural Process
Management™ solutions for enabling
and managing nanotechnology. Our
products allow advanced threedimensional metrology, device
editing, trimming, and structural
analysis for management of submicron structures in integrated
circuits, high density magnetic
storage devices, optical and display
devices, industrial materials,
chemical compounds and biological
structures.

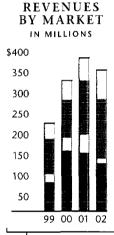
We serve the world's technology leaders in the fields of semiconductors, data storage, structural biology and industry. Our range of industry-leading DualBeam™ and single-column focused ion and electron beam products enables manufacturers and researchers to make technology shifts and develop next generation technologies and products while enhancing production yields, lowering costs and reducing time-to-market. These are critical benefits in the rapidly changing, highly competitive markets we serve.

ABOUT THE COVER: With its 3D Structural Process Management solutions and imaging resolution down to the atomic level, FEI is enabling progress and Moving the Future Forward. The result is a rapidly expanding universe of nanotechnology advances, better living and brighter horizons for consumers, and the ability to continue executing our plan for growth.

#### FEI REVENUES IN MILLIONS \$400 350 300 250 200 150 100 50

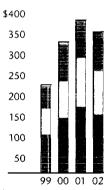
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FEI ANNUAL













CONTROL AND

FEI is an industry

leader serving diverse nanotechnology markets.



NANORESEARCH

ADVANCED 3D STRUCTURAL ANALYSIS
FOR ORGANIC AND MANMADE MATERIALS



NANOFABRICATION

PRECISE 3D REPAIR, EDITING AND

MODIFICATION OF MICROSTRUCTURES

Buoyed by a strong
financial foundation,
our blueprint for
growth continues to
focus on building
value for customers
and shareholders while
Moving the Future
Forward.

## TO OUR SHAREHOLDERS

Four years ago, FEI set out to create a renewed company with global vision and customer-focused solutions that would open new dimensions for researchers and manufacturers working on nanoscale technologies and structures.

Working closely with customers to extend our core technologies into diverse markets, we broadened our customer base and continued our market leadership in NanoMetrology, NanoResearch and NanoFabrication. Despite the prolonged economic downturn and difficult market conditions, FEI's product line has grown, revenues are comparatively strong, and we continue to make important progress in building our business.

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Our strategic mission, based on building a diverse market base, enabled FEI to outperform most industry peers and maintain profitability in 2002 while confronting extended economic and industry uncertainty. We posted strong annual revenues of \$341 million, GAAP earnings of \$0.26 per share including one-time write-offs, and a solid average book-to-bill ratio of 0.97 for the year. Our balance sheet remains healthy, with a year-end cash and investment balance of \$274 million and increased shareholder equity standing at \$327 million.

We remain committed to building value for our customers and shareholders.

## MANAGING MARKET REALITIES, INVESTING IN GROWTH

At FEI we endeavor to manage our business in real time to achieve sustained revenue creation and effective investment in research and development. We work to manage costs closely to preserve profitability and position FEI for future growth. In 2002, this also enabled us to better manage shifts in product mix and market softness.

Prudent management of cash and spending enabled us to continue investing in customer support as we move to expand our 7x24 service coverage and enhance the reliability of our systems for increased uptime.

Our customers are driven by the need for higher resolution, greater accuracy and the need to analyze, modify and manufacture complex nanoscale structures below the surface and in 3D. We deliver these capabilities, bringing cost and time benefits to their operations.

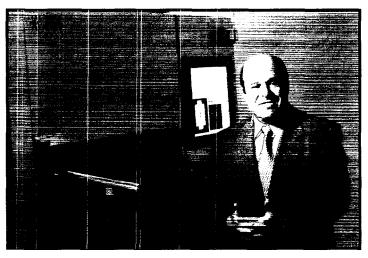
In 2002, we invested in new product development and expansion of our technology and intellectual property portfolios at target levels. As a result, this will be an important year for FEI with expected new product introductions aimed at maintaining our market leadership.

During the year we also invested in increasing our efficiency and productivity with the purchase of FEI's new campus in Hillsboro, Oregon, and the expansion of our manufacturing capability in Brno, Czech Republic. We expect operational cost savings as we consolidate our corporate administration and wafer system manufacturing operations at our new site in Hillsboro, Oregon, and move production of some product lines to Brno where manufac-

turing costs are favorable. These consolidations combined with strategic headcount reductions should result in savings in 2003.

#### OPERATING FROM A POSITION OF STRENGTH IN THE DOWNTURN

We see opportunity despite the semiconductor downturn, overall weakness in technology buying, and increasing competition.



Our comparatively strong financial position allows us to invest strategically in those areas that support our business goals and enhance our competitive strength.

Our talented team of employees remains energized and committed, ready to further execute on our blueprint for growth. We look to expand our business organically and through continued mergers and acquisitions that fit our criteria for growing our company: enrichment of our technology portfolio; expansion of our product and solutions offerings; the attainment of critical mass; and enhanced performance.

The world has never been smaller, nor have the possibilities been so large. We stand at the dawn of the nanotechnology age and are excited by the potential demand for the enabling solutions we offer. I look forward to leading the FEI team as we face the challenges ahead.

Sincerely,

Vahé A. Sarkissian

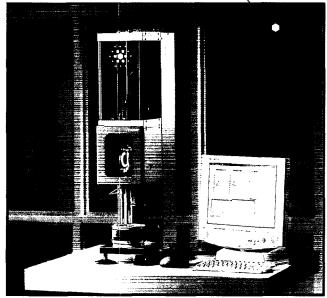
Chairman of the Board, President and CEO

## GROWING TECHNOLOGY

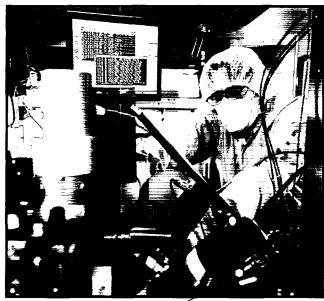
VITROBOT™ SAMPLE PREPARATION FOR

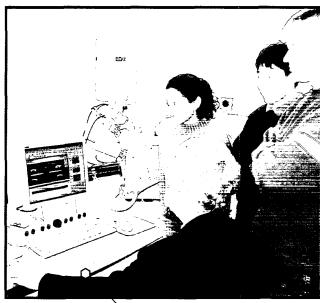
STRUCTURAL BIOLOGY, UNIVERSITY OF MAASTRICHT

SMALL STAGE DUALBEAM R&D FOR MATERIAL SCIENCE









IN-FAB DUALBEAM DEVELOPMENT
FOR MICROELECTRONICS

SCANNING ELECTRON MICROSCOPY FOR NANOCHARACTERIZATION AT STANFORD

#### CORE TECHNOLOGIES AT MORK

FEI's core technologies include focused ion and electron beams, gas beam chemistry, automation, stylus nanoprofilometry and secondary ion mass spectrometry, serving customers in a diverse range of markets including structural biology, materials science, research and microelectronics.

#### NANOSCALE LEADERSHIP FOR CUSTOMER SUCCESS

rom the world's first DualBeam system, to the world's leading, fully-integrated transmission electron microscope (TEM), FEI's leadership position is the result of more than fifty years of electron beam technology development and more than thirty years of focused ion beam innovation.

#### ENABLING NANOSCALE DISCOVERY

Our solutions open up the third dimension for customers, giving them access to structures and materials that lie below the surface, enabling them to achieve breakthroughs and mass produce leading-edge, nanoscale products. FEI's solutions deliver more critical data faster than other metrology and analysis methods, reducing cost, improving yields and speeding time-to-market.

FEI is the pioneer of 3D Structural Process Management solutions. But we're not content with this distinction. With the universe for nanotechnology applications expanding, our global team of more than 450 engineers and developers has their sights set on what is yet to come.

## CONTINUALLY EXPANDING THE THIRD DIMENSION

During 2002, we have focused on expanding our technology base and intellectual property, investing more than \$40 million in R&D and product development. Advanced features and applications have been engineered into our product families and our ion- and electron-beam columns. As a result, FEI customers will see several new products expected in 2003, featuring enhanced performance specifications and new levels of market-specific optimization.

All FEI DualBeam in-line metrology systems are now shipped with FEI's proprietary IC3D™ automated metrology software. This revolutionary "point and click" software significantly simplifies complex metrology. With a 10x reduction in the time it takes to set up new protocols, customers save both time and money while ramping up new processes

more quickly than before. Productivity-enhancing IC3D off-line workstations also deliver new levels of ease and efficiency by enabling customers to review data from anywhere in the world without having to utilize valuable in-line system time.

## STRATEGIC PROGRAMS SUPPORT OUR TECHNOLOGY PORTFOLIO

FEI works with leading research institutions in North America, Europe and Asia to jointly identify new applications and drive advances in nanotechnology. In 2002, FEI commercialized and introduced the Vitrobot, an advanced, automated system for preparing TEM samples at cryogenic temperatures for structural biology studies, developed by the University of Maastricht. In collaboration with Stanford University, FEI helped to open the University's new Nanocharacterization Facility. Advanced automation software, developed in conjunction with one of North America's leading research institutions, is planned for release in 2003.

## ACCELERATING PROGRESS WITH THE MOST POWERFUL TEMS AND SEVENTH GENERATION DUALBEAMS

FEI's newest DualBeam products are seventh generation, integrated systems representing both small-stage lab systems and enhanced fab-ready systems that can support FEI's growing presence in fab environments. Combined with our industry-leading family of Tecnai™ transmission electron microscopes, and a robust offering of advanced scanning electron microscopes (SEMs), FEI customers can now achieve results in hours instead of months. With our focus on customers and commitment to continually building our technology portfolio, FEI is uniquely qualified to support NanoMetrology, NanoResearch and NanoFabrication long into the future.



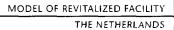


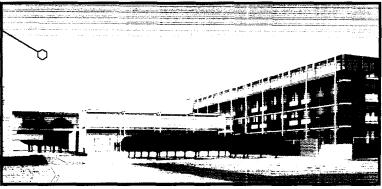


## BUILDING VALUE



FEI'S NEW WORLD CAMPUS
IN OREGON

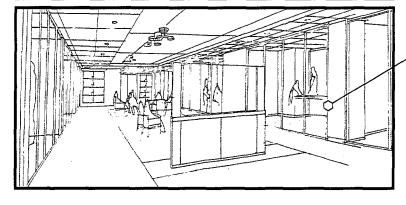




EXPANDED MANUFACTURING.
THE CZECH REPUBLIC



NEW DEMO CENTER
IN OREGON



El's strong balance sheet, sustained profitability and dedicated team of employees are enabling us to identify operational efficiencies, deliver next generation products, and build our competitive position for accelerated growth. Key to this focus is investing in building global capabilities and revitalizing facilities to reduce costs and support growth while taking advantage of market conditions and favorable pricing during the downturn.

## NEW FACILITIES FOR OPERATIONAL STRENGTH

In 2002, FEI took advantage of market opportunities to upgrade its production facilities, world-wide, on favorable terms. In July 2002, FEI announced the purchase of a new, 27-acre campus in Hillsboro, Oregon. The new site contains two buildings featuring 180,000 square feet of space for offices, research and development activities, and Class 1000 clean room manufacturing.

FEI will consolidate its Oregon operations, formerly housed in five separate sites, by August 2003, and bring its North American manufacturing lines for in-line DualBeam and FIB systems into a single, state-of-the-art facility. Including building improvements, FEI's \$25-\$27 million investment in the new campus should result in lower facilities and manufacturing costs, and enhanced productivity. The campus also provides FEI with additional land to accommodate future space needs.

In February 2003, FEI's operations in the Czech Republic moved into a new, 90,000-square-foot facility in Brno that will house R&D, manufacturing and expanded customer service operations. Leveraging the area's strong technology base, qualified workforce and favorable cost structure, FEI will expand the number of products it manufactures in Brno with the goal of reducing overall cost of goods sold and improving margins.

Plans were also announced recently to renovate our European site in the Netherlands. The project, with an anticipated completion date of April 2004, will house expanded demonstration labs and allow us to better support customer needs.

## CENTERS FOR NANOTECHNOLOGY ADVANCEMENT

The utilization of FEI's customer demo centers at its new Oregon campus and in the Netherlands will be expanded to underscore FEI's leadership role in enabling nanoscale research and product development. These state-of-the art centers will feature FEI's market-leading equipment and applications for advancing nanotechnology across the broad markets FEI serves. But in addition to providing important space in which customers can inspect and test systems, FEI is developing plans to broaden the use of these centers to support the ongoing development of new applications. Working with targeted educational and research organizations, FEI intends to define collaborative programs that utilize the technology housed in these centers and deliver mutually beneficial results.

#### AN ENVIRONMENT FOR GROWTH

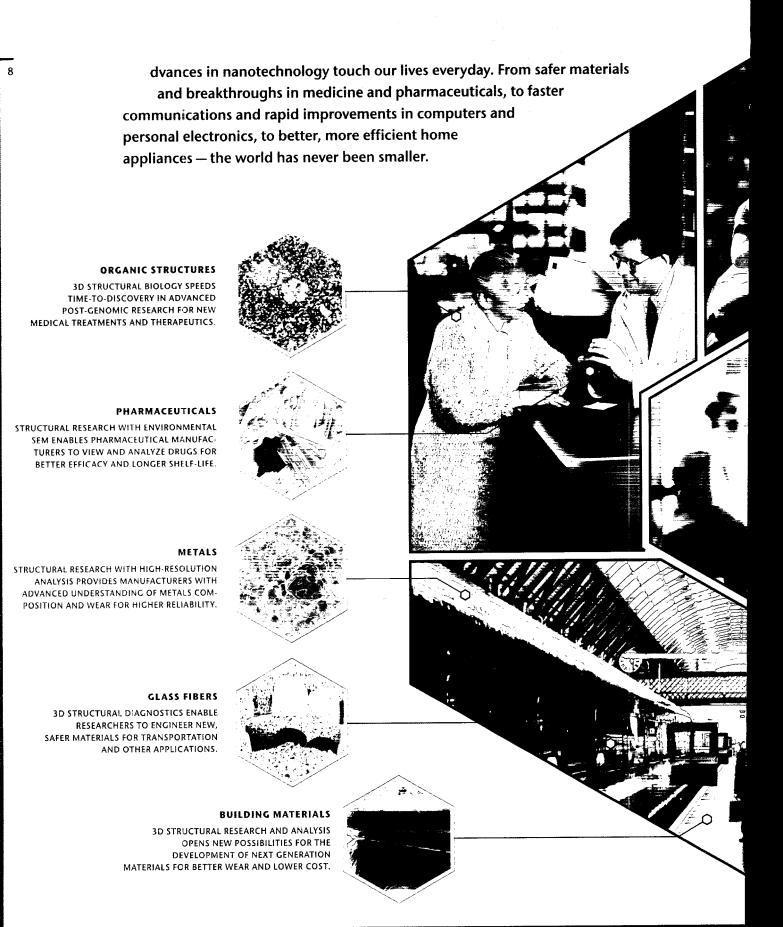
Through strategic investment in R&D and state-of-the-art facilities around the globe, and striving for operational efficiencies, FEI is building an environment to foster growth and the ongoing creation of value for our customers and shareholders.







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## N A RAPIDLY SERELEMENT THERED

opers and manufacturers around the globe to break through the barriers to nanoscale discovery and progress. Our systems in use throughout the world are Moving the Future Forward, bringing better performance to our customers and better living to consumers.



#### **AUTOMOBILE LAMP FILAMENT**

STRUCTURAL DIAGNOSTICS ENABLE
MANUFACTURERS TO DEVELOP SAFER, LONGER-LASTING PRODUCTS FOR CONSUMERS.

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#### DIGITAL CONSUMER ELECTRONICS

STRUCTURAL MODIFICATION/CIRCUIT EDIT SPEEDS TIME-TO-MARKET FOR ADVANCED SEMICONDUCTORS.



#### WIRELESS COMMUNICATIONS

STRUCTURAL MODIFICATION/MASK
REPAIR SAVES BOTH TIME AND MONEY FOR
MANUFACTURERS WORKING WITH ADVANCED
SEMICONDUCTOR PHOTOMASKS.



#### NYLON FIBERS

STRUCTURAL RESEARCH ENABLES MANUFACTURERS TO DELIVER BETTER-WEARING, ADVANCED FABRICS.



### ADVANCED MICROPROCESSORS, MEMORY DEVICES

3D STRUCTURAL DIAGNOSTICS DELIVERS COMPLETE PROCESS DATA IN HOURS INSTEAD OF DAYS, INCREASING YIELDS AND REDUCING COSTS.

THE WORL HAS NEVER BEE SMALLER, NOR HAVE TH POSSIBILITIES BEEN SO LARG

## STRONG MANAGEMENT

BUILDINGVALUE

FRONT ROW: SECOND ROW: BACK ROW: BRAD THIES KEN DAIDOHJI DAVID O'BRIEN PAUL O'MARA STEVEN BERGER VAHÉ SARKISSIAN WADE CLOWES STEVE LOUGHLIN JIM HIGGS MICHEL EPSZTEIN DAVID NARUM JAY LINDQUIST VAHAN TCHAKERIAN

BRUNO JANSSENS ROB FASTENAU

NOT PICTURED: JACK DOHERTY, DANIEL MA

#### SELECTED CONSOLIDATED FINANCIAL DATA

The selected consolidated financial data below should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the consolidated financial statements and notes thereto included elsewhere in this report.

(In thousands, except per share data) Year Ended December 31,		1998		1999		2000		2001		2002
STATEMENT OF OPERATIONS DATA:	<del></del>									
Net sales	\$	178,771	\$	216,152	\$	320,300	\$	376,004	\$	341,381
Cost of sales		119,579		131,143		183,178		193,612		191,568
Gross profit		59,192	-	85,009		137,122		182,392		149,813
Total operating expenses <sup>1</sup>		68,768		87,524		100,602		123,318		131,199
Operating income (loss)		(9,576)		(2,515)		36,520		59,074		18,614
Other expense, net <sup>2</sup>		(4,129)		(65)		(1,637)		(4,074)		(4,946)
Income (loss) before taxes and cumulative										
effect of change in accounting principle		(13,705)		(2,580)		34,883		55,000		13,668
Income tax expense (benefit)		(4,797)		4,800		14,073		22,494		4,990
Income (loss) before cumulative effect of										
change in accounting principle	\$	(8,908)	\$	(7,380)	\$	20,810	\$	32,506	\$	8,678
Income (loss) before cumulative effect of	·				=	<del></del>			_	
change in accounting principle per share:										
Basic	\$	(0.49)	\$	(0.34)	\$	0.74	\$	1.06	\$	0.27
Diluted	\$	(0.49)	\$	(0.34)	\$	0.70	\$	1.02	\$	0.26
Weighted average shares outstanding:										
Basic		18,106		21,745		28,091		30,563		32,493
Diluted		18,106		21,745		29,827		31,986	<del></del>	33,460
(In thousands)										
As of December 31,		1998		1999		2000		2001		2002
BALANCE SHEET DATA:						<del></del> ; <u>-</u>	_			
Cash and cash equivalents	\$	15,198	\$	11,124	\$	24,031	\$	176,862	\$	167,423
Working capital		70,350		84,957		91,175		349,024		295,971
Total assets		191,138		288,100		314,823		607,476	(	532,866
Long-term interest-bearing debt		26,349		36,012		25,674		175,000		175,000
Shareholders' equity		97,627		152,577		168,289		296,516	3	326,925

Included in 1998 operating expenses is a restructuring charge of \$5.3 million undertaken to consolidate operations, eliminate redundant facilities, reduce operating expenses and provide for outsourcing of certain manufacturing activities. Included in 1999 operating expenses is a charge of \$14.1 million to write off acquired in-process research and development in connection with the acquisition of Micrion Corporation in August 1999 and a restructuring charge of \$0.1 million. Included in 2001 operating expenses is a charge of \$3.4 million to write off acquired in-process research and development in connection with acquisitions. Included in 2002 operating expenses is a restructuring charge of \$5.5 million undertaken to consolidate operations, eliminate redundant facilities and reduce operating expenses, plus a charge of \$6.8 million for the proposed merger with Veeco Instruments Inc., which was subsequently cancelled.

<sup>&</sup>lt;sup>2</sup>Included in 1998 other expense, net is a valuation charge of \$3.3 million taken to reduce the carrying value of a cost method investment. Included in 2001 other expense, net is a valuation charge of \$3.7 million to adjust the carrying value of our cost method investment in Surface/Interface to reflect the price we paid to acquire the rest of Surface/Interface in 2001.

## MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion of our financial condition and results of operations should be read in conjunction with our Consolidated Financial Statements and the related notes included elsewhere in this report. This discussion and other sections of this report contain forward-looking statements, which involve risk and uncertainties. Our actual results could differ materially from those anticipated in the forward-looking statements as a result of certain factors, including but not limited to those discussed in the section of our annual report on Form 10-K filed with the Securities and Exchange Commission titled "Cautionary factors that may affect future results" and elsewhere in this annual report.

#### OVERVIEW

FEI was founded in 1971 to design and manufacture charged particle emitters (ion and electron sources). We began manufacturing and selling ion and electron focusing columns in the early 1980's and began manufacturing FIB workstations in 1989. In 1993, we manufactured and sold our first DualBeam systems. In 1997, we acquired substantially all of the assets and liabilities of Philips' electron optics business, a manufacturer of electron microscopes headquartered in Eindhoven, the Netherlands, in exchange for 55% of our common stock. As a result, we became a majority owned subsidiary of Philips. The combination with Philips gave us expanded research and development capabilities, increased manufacturing capacity, a worldwide sales and service organization and additional financial resources. In 1999, we acquired Micrion Corporation, a manufacturer of single beam FIB systems. The acquisition of Micrion broadened our product lines, added research and development strength and expanded our sales and service capabilities in the U.S., Japan and Taiwan. We expect to continue to expand our business in the future through internal growth and strategic acquisitions and partnerships.

From 1998 through 2000, we experienced growth across all business segments and geographic territories and target endmarkets. In 2001, total revenues increased by 17% from 2000, driven by the industry and institute and data storage markets. Our components business and semiconductor end-market segments, however, decreased in revenues over the same period because of severe market down turns in the semiconductor industry. The Asia Pacific geographic region was the only region to experience a decline in revenue in 2001 due to depressed economic conditions in that region.

In 2002, our total revenues declined 9% from 2001, with the industry and institute market and the service business segment growing while the semiconductor and data storage markets declined. Starting in the second half of 2001 through 2002, our sales were negatively affected in the semiconductor market by the worldwide semiconductor downturn. Our sales to the data storage market declined significantly in 2002 due to a technology node shift and market saturation at the technology node offered by our products at the prior node.

On July 11, 2002, we entered into an agreement and plan of merger with Veeco Instruments Inc. On January 9, 2003, we and Veeco announced that we would not consummate the merger due to difficult overall market and economic conditions and the uncertain timing of a technology industry recovery.

#### CUSTOMER CONCENTRATION

Our customer base is diverse, however, we have historically derived a portion of our revenue from sales to a few key customers, and we expect that trend to continue. Sales to our top 10 customers accounted for 31% of our total net sales in 2000, 29% of our total net sales in 2001 and 18% of our total net sales in 2002. No sales to a single customer, however, exceeded 10% of our net sales for 2000, 2001 or 2002.

#### Critical Accounting Policies and the Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the U.S. requires management to make estimates and assumptions. These estimates and assumptions affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amount of revenues and expenses during the reporting period. Significant estimates underlying the accompanying consolidated financial statements include the timing of revenue recognition, the allowance for doubtful accounts, reserves for excess or obsolete inventory, restructuring and reorganization costs, warranty liabilities, the lives and recoverability of equipment and other long-lived assets such as existing technology intangibles and goodwill and software development costs. It is reasonably possible that the estimates we make may change in the future.

**REVENUE RECOGNITION.** For products produced according to our published specifications, revenue is recognized when the title to the product and the risks and rewards of ownership pass to the customer. For products produced according to a particular customer's specifications, revenue is recognized when the product meets the customer's specifications and when the title and the risks and rewards of ownership have passed to the customer. In each case, the portion of revenue applicable to installation and customer acceptance is recognized upon meeting specifications at the installation site. For new applications of our products where performance cannot be assured prior to meeting specifications at the installation site, no revenue is recognized until such specifications are met. Revenue, from time and materials based service arrangements, is recognized as the service is performed. Revenue from service contracts is recognized ratably over the term of the service contracts.

ALLOWANCE FOR DOUBTFUL ACCOUNTS. The allowance for doubtful accounts is estimated based on past collection problems and known trends with current customers. The large number of entities comprising our customer base and their dispersion across many different industries and geographies somewhat mitigates our credit risk exposure and the magnitude of our allowance for doubtful accounts. Our estimates for allowance for doubtful accounts are reviewed and updated on a quarterly basis. Changes to the reserve occur based upon changes in revenue levels and associated balances in accounts receivable and estimated changes in credit quality.

**RESERVES FOR EXCESS OR OBSOLETE INVENTORY.** Inventory is stated at the lower of cost or market, with cost determined by standard cost methods, which approximate the first-in, first-out method. Inventory costs include material, labor and manufacturing overhead. Reserves for inventory obsolescence

and excess quantities are reviewed and established on a quarterly basis, based on estimated future use of quantities on hand, which is determined based on past usage, planned changes to products, and known trends in markets and technology. Because of the long-lived nature of many of our products, we maintain a substantial supply of parts for possible use in future repairs and customer field service. As these service parts become older, we apply a higher percentage of reserve against the recorded balance, recognizing that the older the part, the less likely it is ultimately to be used. We disposed of inventory and charged the cost against the related excess and obsolescence reserve in the amount of \$7.6 million in 2002 and \$2.3 million in 2001.

**PURCHASED GOODWILL**. Purchased goodwill, which represents the excess of cost over the fair value of net assets acquired in a business combination, was amortized through December 31, 2001 on a straight-line basis over the estimated economic lives of acquisitions made before July 1, 2001. For acquisitions made after June 30, 2001, purchased goodwill is not amortized. In addition, effective January 1, 2002, purchased goodwill is no longer amortized for acquisitions made before July 1, 2001. We evaluate goodwill for impairment annually and whenever events or changes in circumstances indicate the carrying amount of goodwill may not be recoverable. We perform our annual impairment test in November each year. To perform that test, we compare the carrying value of our business segments to our estimates of the fair value of each of those segments. If the fair value of a business segment is less than its carrying value, we will writedown the related goodwill to its implied fair value. We use estimates of future cash flows, discounted to present value, and other measures of fair value to estimate the relative fair value of each of our business segments. It is reasonably possible that our estimates of future cash flows, discount rates and other assumptions inherent in the calculation of the estimated fair value of each business segment will change in the future, which could cause us to writedown goodwill at that time. See also the heading "Recently Issued Accounting Pronouncements" below.

**EXISTING TECHNOLOGY INTANGIBLE ASSETS.** Existing technology intangible assets purchased in a business combination, which represent the estimated value of products utilizing technology existing as of the combination date discounted to their net present value, are amortized on a straight-line basis over the estimated useful life of the technology. We currently are using amortization periods ranging from five to twelve years for these assets. Changes in technology could affect our estimate of the useful lives of such assets. Please also read Note 2 to the consolidated financial statements included elsewhere in this report. We have not changed estimated useful lives or written down our intangible assets during the years 2000, 2001 or 2002. **RESTRUCTURING AND REORGANIZATION COSTS.** Restructuring and reorganization costs are estimated and recorded at the date when we have committed to a restructuring plan, under accounting guidance in effect through December 31, 2002. Restructuring and reorganization costs include estimated severance and other costs related to employee terminations as well as facility costs related to future abandonment of various leased

office and manufacturing sites. As changes to these estimates occur in subsequent periods resulting from timing changes or other factors, we will record either an increase or decrease to the estimated costs previously recorded. It is reasonably possible that actual costs incurred in the future will differ from the amounts recorded as of December 31, 2002.

Effective January 1, 2003, new accounting guidance will be effective for exit and restructuring activities initiated after 2002, which supersedes previous guidance. Under the new accounting guidance, recognition of liabilities for exit and restructuring costs will be recognized as incurred, as opposed to when an exit plan is approved, and will be measured and recorded at fair value. See also the heading "Recently Issued Accounting Pronouncements" below.

warranty. A reserve is established at the time of sale to cover estimated warranty costs and certain commitments for product upgrades. Our estimate of warranty cost is primarily based on our history of warranty repairs and maintenance, as applied to systems currently under warranty. For our new products without a history of known warranty costs, we estimate the expected costs based on our experience with similar product lines and technology. While most new products are extensions of existing technology, the estimate could change if new products require a significantly different level of repair and maintenance than similar products have required in the past. Our estimated warranty costs are reviewed and updated on a quarterly basis. Changes to the reserve occur as volume, product mix and warranty costs fluctuate.

LIVES AND RECOVERABILITY OF EQUIPMENT AND OTHER LONG-LIVED ASSETS. We evaluate the remaining life and recoverability of equipment and other assets, including intangible assets, whenever events or changes in circumstances indicate that the carrying amount of the asset may not be recoverable. If there is an indication of impairment, we prepare an estimate of future, undiscounted cash flows expected to result from the use of the asset and its eventual disposition. If these cash flows are less than the carrying value of the asset, we adjust the carrying amount of the asset to its estimated fair value.

**SOFTWARE DEVELOPMENT COSTS.** We capitalize certain software development costs for software expected to be sold within our products. Such costs are capitalized after the technological feasibility of the project is determined and are reported on the balance sheet in other assets. Once we begin to include such software in our products, these costs are amortized over the estimated economic life of the software, which is usually 3 years. Changes in technology could affect our estimate of the useful life of such assets. If we expensed such costs as they are incurred, our operating profit would have decreased by \$0.7 million, \$0.0 million and \$4.0 million in 2000, 2001 and 2002, respectively. This trend is a result of increased investment in software content within our products in 2002.

#### MANAGEMENT'S DISCUSSION AND ANALYSIS

Continued

#### RESULTS OF OPERATIONS

The following table sets forth our statement of operations data as a percentage of net sales.

Year Ended December 31,	2000	2001	2002
Net sales	100.0%	100.0%	100.0%
Cost of sales	57.2	51.5	56.1
Gross profit	42.8	48.5	43.9
Research and development	9.9	11.0	12.4
Selling, general and			
administrative	19.6	19.0	21.0
Amortization of purchased			
goodwill and technology	1.9	1.8	1.4
Purchased in-process			
research and development			
costs	0.0	0.9	0.0
Merger costs	0.0	0.0	2.0
Restructuring and			
reorganization costs	0.0	0.0	1.6
Operating income	11.4	15.7	5.5
Other expense, net	(0.5)	_(1.1)	(1.5)
Income before taxes and			
cumulative effect of		•	
change in accounting			
principle	10.9	14.6	4.0
Income tax expense	-4.4	6.0	1.5
Income before cumulative effect of change in			
accounting principle	6.5	8.6	2.5
Cumulative effect of			
change in accounting			
principle, net of tax benefit	(2.3)	0.0	0.0
Net income	4.2%	8.6%	2.5%

Totals may not foot due to rounding.

#### Net Sales

Net sales include sales in our microelectronics, electron optics, components and service segments. Net sales were \$341.4 million in 2002 and \$376.0 million in 2001; a decrease of \$34.6 million, or 9%. The decrease in net sales was caused by both a decline in volume and in price, which was due to general economic conditions and decreased spending by our customers in the semiconductor and data storage markets. Sales in the service segment increased from 2001 due to a larger installed base.

Net sales were \$376.0 million in 2001 and \$320.3 million in 2000; an increase of \$55.7 million, or 17%. The increase in net sales was primarily a result of an increase in sales volume, primarily in the industry and institute and data storage markets and a change in our product mix within the microelectronics segment.

#### Net Sales by Segment

The following table shows our net sales by segment.

(In thousands) Year Ended December 31,	2000	2001	2002
Microelectronics	\$ 147,307	\$ 168,482	\$ 128,549
Electron Optics	107,982	136,720	134,700
Components	18,277	15,317	10,328
Service	46,734	55,485	67,804
	\$ 320,300	\$ 376,004	\$ 341,381

#### MICROELECTRONICS

Microelectronics segment sales were \$128.5 million in 2002 and \$168.4 million in 2001; a decrease of \$39.9 million, or 24%. The decrease was primarily a result of decreased sales volume and price, which is attributable to the continued global economic weakness in the semiconductor and data storage markets. Our sales to the data storage market declined significantly in 2002 due to market saturation of the technology offered by our products. In 2002, we shipped 24% fewer systems than in 2001, but the product mix remained about the same in 2002 as in 2001.

Microelectronics segment sales were \$168.4 million in 2001 and \$147.3 million in 2000; an increase of \$21.1 million, or 14%. The increase was primarily a result of changes in product mix and an increase in higher priced dual beam units shipped in 2001 versus lower priced single beam FIB systems shipped in 2000. In 2001, we shipped 29% more dual beam systems and 46% fewer single beam systems than in 2000. The broadening of our product lines, the development of new applications for our products and increased acceptance and penetration in the semiconductor, data storage and industry and institute markets also contributed to increased sales volume for this segment in 2001. Growth drivers for our business in the semiconductor industry have included shrinking feature geometries, the transition to copper and new dielectrics, the transition to 300 mm size wafers and shortening product life cycles. Our sales in this segment, however, decreased in the second half of 2001 compared with the first half of 2001 due to the worldwide downturn in the semiconductor industry.

#### **ELECTRON OPTICS**

Electron optics segment sales were \$134.7 million in 2002 and \$136.7 million in 2001; a decrease of \$2.0 million, or 1%. The decrease was primarily a result of price pressure in the market place and a decrease in volume, partially offset by a positive currency impact. Total electron optics segment unit shipments decreased by 4% from 2001 to 2002. TEM sales for 2002 decreased \$5.5 million, or 7%, on flat unit shipments because of strong pressure on sales price. Sales of our SEM products increased \$1.9 million, or 3% from 2001 to 2002 due to continued strong demand for our Quanta SEM products. Sales of our SIMS system product began in 2002 and totaled \$1.6 million.

Electron optics segment product sales were \$136.7 million in 2001 and \$108.0 million in 2000; an increase of \$28.7 million, or 27%. The increase was primarily a result of higher sales volumes and changes in product mix. Total electron optics segment unit shipments increased by 19% from 2000 to 2001.

Growing market acceptance for our Tecnai TEM products along with the introduction of a new, lower priced TEM product line resulted in a 28% increase in TEM sales for 2001 versus 2000. Sales of our SEM products increased 25% from 2000 to 2001 due to strong demand for our new Quanta SEM products and overall increased demand and sales volume.

#### COMPONENTS

Components segment sales were \$10.3 million in 2002 and \$15.3 million in 2001; a decrease of \$5.0 million, or 33%, reflecting lower sales volumes because our component segment revenues tends to follow the cyclical pattern of the semiconductor equipment business, which has experienced significant downturns since 2001.

Components segment sales were \$15.3 million in 2001 and \$18.3 million in 2000; a decrease of \$3.0 million, or 16%, reflecting lower sales volumes because of the cyclical downturn of the semiconductor equipment business beginning in 2001. **SERVICE** 

Service sales were \$67.8 million in 2002 and \$55.5 million in 2001; an increase of \$12.3 million, or 22%. The increases in service segment sales were primarily the result of increases in the number of systems under service contracts in our installed base. In addition, we have increased penetration in the semiconductor and data storage markets and the customers in these markets tend to have higher demands for service response time. In general, our service contracts carry higher prices as the guaranteed response time is shortened.

Service sales were \$55.5 million in 2001 and \$46.7 million in 2000; an increase of \$8.8 million, or 19%. The increases in service segment sales were primarily the result of increases in the number of systems under service contracts in our installed base.

#### Sales by Geographic Region

A significant portion of our revenue has been derived from customers outside of the U.S. and we expect that trend to continue. Our percentage of total net sales outside the U.S. was 58% in 2000, 57% in 2001 and 59% in 2002.

The following table shows our net sales by geography.

O .		7001	
Year Ended December 31,	2000	2001	2002
Net Sales by Geographic Region	:		
North America	43%	43%	42%
Europe	27	32	31
Asia Pacific Region	29	25	27
Rest of World	1	0	_ 0
	100%	100%	100%

Net sales decreased from 2001 to 2002 across all regions. In North America, sales were \$142.6 million in 2002 and \$163.2 million in 2001; a decrease of \$20.6 million, or 13% due to depressed demand in the semiconductor and data storage markets. In Europe, sales were \$105.1 million in 2002 and \$119.0 million in 2001; a decrease of \$13.9 million, or 12%, which was caused by decreased demand in the semiconductor market combined with overall price pressure, and was partially offset by increased demand in the industry and institute markets. In the Asia Pacific region, sales were \$93.7 million in 2002 and \$93.9 million in 2001; a decrease of \$0.2 million, or less than 1% due to reduced demand in both the semiconductor and data storage sectors. Sales in the Asia Pacific region during the

second half of 2002, however, were up 34% from the second half of 2001, reflecting improvement in economic conditions in that region.

Net sales increased from 2000 to 2001 in both North America and Europe but decreased in the same period in the Asia Pacific region. In North America, sales were \$163.2 million in 2001 and \$135.4 million in 2000; an increase of \$27.8 million, or 21%, due to increased demand in the data storage and industry and institute markets in that region. In Europe, sales were \$119.0 million in 2001 and \$89.4 million in 2000; an increase of \$29.6 million, or 33%. Approximately 60% of the increase was in the industry and institute market, and approximately 35% was in the semiconductor market. In the Asia Pacific region, sales were \$93.9 million in 2001 and \$95.6 million in 2000; a decrease of \$1.7 million, or 1%, due to reduced demand in both the semiconductor and data storage sectors and the overall depressed economic conditions in that region of the world during the second half of 2001.

#### **Gross Profit**

Our gross profit is net sales less cost of sales. Cost of sales includes manufacturing costs such as materials, labor (both direct and indirect) and factory overhead, as well as all of the costs of our service function such as labor, materials, travel and overhead. Gross profit as a percentage of sales, or gross margin, was 42.8% in 2000, 48.5% in 2001 and 43.9% in 2002.

Our gross profit was \$149.8 million in 2002 and \$182.4 million in 2001; a decrease of \$32.6 million, or 17.9% due to the reduction in net sales of \$34.6 million in the same period combined with lower gross margins. We realized lower gross margins primarily due to a change in our product mix. In general, our microelectronics products carry higher gross margins than our electron optics products and our service business carries lower gross margins than any of our other segments. Microelectronics products decreased from 44.8% of our net sales in 2001 to 37.7% of our net sales in 2002. Our service segment sales increased from 14.8% of our net sales in 2001 to 19.9% in 2002. Though service segment margins remain well below system margins, service segment gross margins improved from 2001 to 2002 due to continued improved economies of scale from the additional growth in our installed base of systems. In 2002, our overall margins were also adversely affected by pricing pressures due to weak market conditions and from competitors who have introduced new products into our markets or who benefit from favorable currency exchange movements in their home countries. We also experienced cost increases in 2002 from some of our larger vendors.

Our gross profit was \$182.4 million in 2001 and \$137.1 million in 2000; an increase of \$45.3 million, or 33% due to the increase in net sales of \$55.7 million in the same period combined with higher gross margins. Higher gross margins were realized due to the positive effects of greater factory overhead absorption and other efficiencies resulting from higher manufacturing volumes and outsourcing arrangements. Additionally, service margins increased from 2000 due to economies of scale resulting from an increase in our installed base of systems.

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#### MANAGEMENT'S DISCUSSION AND ANALYSIS

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Our gross margins also have been affected by exchange rate fluctuations discussed below under the heading "Foreign Currency Exchange Rate Risk". During 2000 and 2001, the exchange rates were favorable to us, and in 2002, the U.S. Dollar experienced serious declines in value, with a negative effect on gross margin.

As part of our overall emphasis on cost reduction, we are seeking to lower material costs in 2003 by coordination and management of our worldwide supply chain and by improving the engineering and design of our products. We expect that these targeted cost reductions, when combined with the anticipated benefits from our restructuring and reorganization plan, should allow us to achieve operating savings by the end of 2003. Please read also "Restructuring and Reorganization Costs" below in this section.

Our ability to improve our gross margins and reduce materials costs could be affected by changes in product mix, reduced product sales or average selling prices, further pricing pressure from competitors, delay in the introduction of new products; unfavorable movements in currency exchange rates; cost increases from suppliers; unsuccessful transition of subcomponent manufacture to new sources; and continued weakness in the semi-conductor market; among other factors.

#### Research and Development Costs

Research and development, or R&D, costs include labor, materials, overhead and payments to Philips and other third parties incurred in research and development of new products and new software or enhancements to existing products and software.

R&D costs were \$42.5 million in 2002 and \$41.5 million in 2001; an increase of \$1.0 million, or 2%. As a percentage of sales, R&D costs were 11.0% for 2001 and 12.4% for 2002. R&D costs are reported net of subsidies and capitalized software development costs. These offsets totaled \$4.9 million in 2001 and \$10.9 million in 2002. The growth in offsets from 2001 to 2002 was the result of both requalifying for the MEDEA funding that expired in 2001 and new funding received from the International SEMATECH industry consortium for a development project for advanced mask repair tools. We expect the SEMATECH funding to decrease over the next few years, as the work on the SEMATECH contract is completed, but we do not expect this will have an overall impact on our R&D costs. Excluding the effects of these offsets, R&D costs increased \$7.0 million, or 15% in 2002 compared to 2001. The increase in R&D costs in 2002 is attributable to investment in the development of product improvements and upgrades, new software systems and new products to broaden the product line offerings of our business segments. In general, we expect our R&D costs will increase over time.

R&D costs were \$41.5 million in 2001 and \$31.6 million in 2001; an increase of \$9.9 million, or 31%. As a percentage of sales, R&D costs were 9.9% for 2000 and 11.0% for 2001. R&D costs are reported net of subsidies and capitalized software development costs. These offsets totaled \$6.2 million in 2000 and \$4.9 million in 2001. Excluding the effects of these offsets,

R&D costs increased \$8.6 million, or 23% in 2001 compared to 2000. The increase in R&D costs in 2001 is attributable to increases in engineering headcount, including employees added through two small acquisitions. In addition, in 2001 there was a reduction in subsidy offsets from MEDEA, a European R&D funding organization, because they ceased when Philips ownership decreased in May 2001. In late 2001, we re-qualified for these programs on a stand-alone basis and now are continuing to receive MEDEA funding.

#### Selling, General and Administrative Costs

Selling, general and administrative, or SG&A, costs include labor, travel, outside services and overhead incurred in our sales, marketing, management and administrative support functions. SG&A costs also include sales commissions paid to our employees as well as to our agents.

SG&A costs were \$71.5 million in 2002 and \$71.6 million in 2001; a decrease of \$0.1 million, or less than 1%. As a percentage of sales, SG&A costs were 19.0% in 2001 and 21.0% in 2002. The increase in SG&A costs as a percentage of sales from 2001 to 2002 primarily is attributable to the ratio effect of lower sales volumes in 2002 and the fact that many SG&A costs are fixed or semi-fixed rather than variable in nature. The slight decrease in SG&A costs from 2001 to 2002 was a result of continued cost containment efforts.

SG&A costs were \$71.6 million in 2001 and \$62.8 million in 2000; an increase of \$8.8 million, or 14%. As a percentage of sales, SG&A costs were 19.6% in 2000 and 19.0% in 2001. The increase in SG&A costs from 2000 to 2001 was a result of higher sales volumes, increased marketing efforts, expansion of our product demonstration capabilities, and increased costs for insurance and other services following the separation from Philips. In 2001, we also incurred shutdown costs of \$0.3 million to close our branch in Korea and to enter into an independent agent arrangement. Due to this change, we incurred severance costs of \$0.9 million for elimination of some redundant positions. SG&A costs also increased in dollar amount from 2000 to 2001 as a result of higher sales volumes and associated higher sales commissions. The decrease in SG&A costs as a percentage of sales from 2000 to 2001 primarily is attributable to the ratio effect of increased sales volumes and the fact that many SG&A costs are fixed or semi-fixed rather than variable in nature.

#### Amortization of Purchased Goodwill and Technology

Purchase accounting for the acquisition of Philips' Electron Optics division in 1997 resulted in the recognition of intangible assets in the amount of \$16.5 million for existing technology that is being amortized over a 12-year period, and goodwill of \$17.1 million, that was being amortized over a 15-year period. Purchase accounting for the Micrion acquisition in August 1999 resulted in the recognition of intangible assets in the amount of \$16.3 million for existing technology, which is being amortized over a 10-year period, and goodwill of \$24.1 million that was being amortized over a 12-year period. Purchase accounting for acquisitions in 2001 resulted in the recognition of intangible assets in the amount of \$9.1 million for existing technology that is being amortized over a 5-year period, and goodwill of \$1.4 million, which has not been amortized.

In accordance with Statement of Financial Accounting Standards, or SFAS, No. 142, "Goodwill and Other Intangible Assets," which we adopted on July 2, 2001, we no longer amortize purchased goodwill effective January 1, 2002. Under SFAS No. 142, amortization has been replaced with a periodic impairment test for goodwill. Amortization of such goodwill totaled \$3.1 million in both 2000 and 2001. Read also Note 2 to the consolidated financial statements included elsewhere in this report and the heading "Recently Issued Accounting Pronouncements" below.

Amortization of purchased goodwill and technology was \$4.8 million in 2002 and \$6.7 million in 2001; a decreased of \$1.9 million, or 29%, due to the cessation of goodwill amortization, which was partially offset by \$1.2 million of new amortization for purchased technology recorded during 2002 from acquisitions made during 2001.

Amortization of purchased goodwill and technology was \$6.7 million in 2001 and \$6.1 million in 2000; an increase of \$0.6 million, or 10%, due to the amortization of existing technology from acquisitions made during 2001.

#### Purchased In-Process Research and Development

In 2001, purchase accounting for acquisitions resulted in the recognition of intangible assets in the amount of \$3.4 million, representing the estimated fair value of in-process research and development. In accordance with our policy to expense research and development costs as they are incurred, these intangible assets were written off with a charge to earnings immediately after the closing of these acquisitions. In connection with the purchase accounting for these acquisitions, we identified two significant projects under development at the date of acquisition. Neither of these projects had been proven technologically feasible or had generated revenue or cost savings as of the date of the acquisition.

The first project concerned image engine technology that could be applied to certain of our existing FIB products and, if successful, would improve the performance and reliability of these products. This development project was approximately 56% complete and was assigned an estimated fair value of \$0.4 million at the date of acquisition. This project was expected to cost approximately \$0.1 million to complete and completion was expected in 2002. As of December 31, 2002, the image engine project was complete. The total cost of the image engine project was approximately \$0.5 million due to expanded scope and enhanced specifications for the project. The image engine project technology is now targeted for use in products to be shipped beginning in 2003.

The second project concerned the development of a new metrology tool with wafer handling capability. This project was approximately 21% complete and was assigned an estimated fair value of \$3.0 million at the date of acquisition. This project was expected to cost approximately \$0.6 million to complete and completion was expected in 2002. As of December 31, 2002, the metrology tool project was complete, with expected first product shipments in early 2003. The metrology tool project cost approximately \$1.5 million to complete due to further design modifications related to a change in market direction and enhanced product specifications.

Because of the nature of these projects, there is always the risk that a technological hurdle may be encountered that may delay, prevent or increase the cost of development of these projects, or that market conditions may change the utility of the technology.

#### **Merger Costs**

During 2002, \$6.8 million of legal, accounting and investment banking costs were incurred and expensed in connection with our proposed merger with Veeco. Subsequent to December 31, 2002, the proposed merger was terminated by mutual agreement. Please read also the section titled Terminated Merger Agreement with Veeco Instruments Inc. below.

#### RESTRUCTURING AND REORGANIZATION COSTS

During the fourth quarter of 2002, in response to the continuing global economic downturn, we recorded restructuring and reorganization charges of \$5.5 million related to our plan to consolidate operations, reduce excess leased facilities and reduce operating expenses. Costs included in the charges consist of employee termination and other related costs, and facility and leasehold improvement charges related to future abandonment of various leased office and manufacturing sites in North America and Europe.

The plan, as of December 2002, included the removal of approximately 145 employees, or 9% of our worldwide work force. The positions affected include manufacturing, marketing, administrative, field service and sales personnel. During the fourth quarter of 2002, employees were informed of the headcount reduction plans and the related severance benefits they would be entitled to receive. Approximately 40% of the planned terminations were completed in the fourth quarter of 2002, and the remaining positions will be terminated throughout 2003: approximately 3%, 12%, 22% and 23%, in the first through fourth quarters of 2003, respectively. The positions remaining to be terminated as of December 31, 2002 primarily are located in the U.S. and Europe. For certain of the terminated employees in foreign countries, we are required to make continuing payments for a period of time after employment ends under existing employment laws and regulations.

Leasehold improvements and facilities represent ongoing contractual lease payments, less estimated proceeds from subleasing activities, and the remaining net book value of leasehold improvements for various buildings located in the U.S. and Europe. Lease costs and leasehold improvements for these facilities will be charged against the restructuring accrual on a monthly basis when the premises are vacated, until the lease contracts expire or the facilities are sub-leased. We expect to vacate these premises during 2003.

Total cash outlays under the restructuring and reorganization plan are expected to be \$5.3 million, of which \$0.5 million was paid during the fourth quarter of 2002. The remaining cash expenditures relating to workforce reductions are expected to be paid in 2003. The current estimates accrued for abandoned leases, net of estimated sublease payments, will be paid over their respective lease terms through 2006. We expect to complete the restructuring and reorganization plan by the end of 2003.

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#### MANAGEMENT'S DISCUSSION AND ANALYSIS

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The various components of the charge in the fourth quarter of 2002 were as follows (in thousands):

		harged to xpense		Settled		urrency islation	Ending Accrued Liability
Severance, outplacement and related benefits for terminated employees	\$	3,660	\$	(467)	\$	140	\$ 3,333
Leasehold improvements	,		•	(,	•		-,
and facilities		1,869					 1,869
Balance accrued as of December 31, 2002	\$	5,529	\$	(467)	\$	140	\$ 5,202

The above restructuring charges are based on estimates that are subject to change. Workforce related charges could change because of shifts in timing or changes in amounts of severance and outplacement benefits. Facilities charges could change because of changes in when we vacate the buildings or changes in sublease income. Our ability to generate sublease income, as well as our ability to terminate lease obligations at the amounts estimated, is dependent upon lease market conditions at the time we negotiate the lease termination and sublease arrangements. Variance from these estimates could alter our ability to achieve anticipated expense reductions in the planned timeframe and modify our expected cash outflows and working capital.

In our investor conference call for the third fiscal quarter results of 2002, we discussed potential operating cost reductions from our restructuring and reorganization plan and other cost reduction efforts. We stated these initiatives would allow annualized cost savings of approximately \$10 million. Since that time, however, we have gained further understanding of our expected operating expenses for 2003. We continue to believe that successful implementation of our restructuring and reorganization plan should result in annualized cost reductions of approximately \$9 to \$10 million. However, based on our current view of operations, we believe that our cost reductions will be partially offset by certain increased costs, particularly in the first half of 2003. Offsets are expected to be smaller in the second half of 2003 and cost reductions are expected to be larger in that period. Offsetting costs will include: selective hiring to acquire critical skills; salary increases; increased operating costs resulting from foreign currency fluctuations; and costs of redundant operations while we transition manufacturing lines to the Brno site and consolidate our Hillsboro operations. Further, as noted above, the reorganization plan is subject to variance from our estimated results. In addition to variance from estimates, other factors that could undermine cost reduction efforts include changes in sales volumes and delay or problems in implementing our move to lower cost manufacturing at our facility in the Brno and consolidation in Hillsboro. For a discussion of other factors that could affect our overall cost reduction efforts please read "Gross Profit" above.

#### Other Income (Expense), Net

Interest income represents interest earned on the short-term temporary investment of cash and, for 2002, investments of cash for longer terms. Interest rates decreased significantly during the second half of 2001 and in 2002.

Interest income was \$6.8 million in 2002 and \$4.7 million in 2001; an increase of \$2.1 million, or 46%. The increase in interest income in 2002 compared to 2001 is the result of increased cash balances, which was partially offset by lower average interest rates.

Interest income was \$4.7 million in 2001 and \$0.9 million in 2000; a increase of \$3.8 million, or 430%. The increase in interest income in 2001 compared to 2000 is the result of a significant increase in cash balances, which was partially offset by lower average interest rates. Completion of the common stock offering in May 2001 and the convertible debt offering in August 2001 provided additional cash that has been invested in marketable debt securities.

Interest expense was \$11.1 million in 2002 and \$5.6 million in 2001; an increase of \$5.5 million, or 98%. Interest expense for 2002 and 2001 includes \$10.5 million and \$4.4 million, respectively, for convertible debt issued in August 2001. The remaining interest expense of \$0.6 million in 2002 and \$1.2 million in 2001 represents interest incurred on borrowings under our bank line of credit facilities and on borrowings from Philips under the Philips credit facility, which was terminated prior to the August 2001 debt offering.

Interest expense was \$5.6 million in 2001 and \$2.3 million in 2000; an increase of \$3.3 million, or 139%. The interest expense of \$2.3 million in 2000 represents interest incurred on borrowings under our bank line of credit facilities and on borrowings from Philips under the Philips credit facility. Excluding the convertible debt interest of \$4.4 million, interest expense decreased in 2001 compared with 2000, reflecting lower levels of borrowing and lower interest rates. Some of the proceeds from the common stock offering in May 2001 were used to reduce borrowings.

In July 2001, the Company entered into a definitive agreement to purchase the assets of Surface/Interface, and the acquisition closed in August 2001. As a result of this agreement, we adjusted the carrying value of our existing investment in Surface/Interface to reflect the purchase price in the definitive agreement and recorded a valuation charge to earnings of \$3.7 million in the second quarter of 2001.

#### Income Tax Expense

Our effective income tax rate on pre-tax book income was 37% for 2002, 41% for 2001 and 40% for 2000. Our effective tax rate differs from the U.S. federal statutory tax rate primarily as a result of the effects of state and foreign taxes and our use of a foreign sales corporation for exports from the U.S., research and experimentation tax credits earned in the U.S., the nondeductible write-off of purchased in-process research and development costs and the amortization of goodwill that is not deductible for income tax purposes and other factors. The 2002 effective tax rate decreased compared to the rate for 2001, primarily due to tax credits for research and experimentation, which were a higher percentage of pretax income in 2002 compared to

2001. The 2001 effective tax rate was primarily increased over 2000 by state and foreign taxes, in-process research and development on acquisitions and goodwill amortization and was decreased by tax credits for research and experimentation. The 2000 effective rate was primarily increased by goodwill amortization. Read also Note 11 to the consolidated financial statements included elsewhere in this report.

In addition to the factors mentioned above, our effective income tax rate on pre-tax book income can be affected by changes in statutory tax rates in the U.S. and foreign jurisdictions, our ability or inability to utilize various carry forward tax items, changes in tax laws in the U.S. governing research and experimentation credits and foreign sales corporations and other factors. The World Trade Organization recently ruled against the U.S. tax policies covering U.S. exports and it is unclear what action, if any, the U.S. government may take in response to this ruling. Subsequently, we are not able to estimate the future effective income tax rate we may incur.

#### CUMULATIVE EFFECT OF CHANGE IN ACCOUNTING PRINCIPLE

Effective January 1, 2000, we changed our revenue recognition policy to defer the portion of the billing related to installation and final acceptance at the customer site until the installation and final acceptance are completed. This change was made in accordance with SAB 101. The effect of this change, net of income taxes, is reported as the cumulative effect of a change in accounting principle in the year ended December 31, 2000. This net effect reflects the deferral as of January 1, 2000 of \$8.4 million of revenue previously recognized. All such revenue initially deferred on January 1, 2000 upon adoption of SAB 101 was recognized during 2000.

#### LIQUIDITY AND CAPITAL RESOURCES

Our sources of liquidity and capital resources as of December 31, 2002 consist of our \$221.6 million of cash, cash equivalents and short-term investments, \$52.0 million in noncurrent investments, and \$11.7 million of available borrowings under our existing credit facilities, as well as our expected future cash flow from operations. We believe that these sources of liquidity and capital will be sufficient to meet our expected needs for the next twelve months and will likely be sufficient for the foreseeable future.

#### Sources of Liquidity and Capital Resources

Our cash and cash equivalents were \$167.4 million as of December 31, 2002 and \$176.9 million as of December 31, 2001; a decrease of \$9.4 million. This decline resulted from cash flows provided from operations of \$16.8 million in 2002, proceeds from employee stock plans of \$5.3 million, net increase in investments of \$12.6 million, offset by investments including approximately \$38.4 million to acquire a new facility in Hillsboro, Oregon and other property, plant and equipment. Cash and cash equivalents were \$176.9 million as of December 31, 2001 and \$24.0 million as of December 31, 2000; an increase of \$152.8 million. This increase resulted primarily from the cash proceeds of our convertible debt and common stock offerings of \$257.1 million in 2001 and the improved cash flows from operations of \$62.2 million in 2001 as compared to \$38.4 million in 2000.

Our short-term investments represent marketable debt securities that had maturities greater than 90 days when we purchased them. All such investments are scheduled to mature in less than twelve months from the balance sheet date. Short-term investments were \$54.2 million as of December 31, 2002 and \$118.8 million as of December 31, 2001; a decrease of \$64.6 million. The decrease in short-term investments was largely offset by our purchase of \$52.0 million of non-current investments in 2002. Total investments thus decreased from \$118.8 million at December 31, 2001 to \$106.2 million at December 31, 2002. Non-current investments represent marketable debt securities, which are scheduled to mature more than twelve months from the balance sheet date. We intend to hold both the short-term and non-current securities to their maturity dates.

We maintain a \$10.0 million unsecured and uncommitted bank borrowing facility in the U.S. and various limited facilities in selected foreign countries. In addition, we maintain a \$5.0 million unsecured and uncommitted bank facility in the U.S. and a \$3.1 million facility in the Netherlands for the purpose of issuing standby letters of credit and bank guarantees. At December 31, 2002, we had outstanding standby letters of credit and bank guarantees totaling approximately \$1.4 million to secure customer advance deposits. At December 31, 2002 we also had outstanding \$8.9 million of foreign bank guarantees that are secured by cash balances.

#### Cash Flows from Operations

Operating activities generated cash of \$16.8 million in 2002, \$62.2 million in 2001 and \$38.4 million in 2000. Our primary source of cash from operating activities has been our net income, as adjusted to exclude the effect of non-cash charges and changes in working capital requirements, including accounts receivable, inventory and current liabilities. The decrease in cash flow from operations in 2002 resulted from our decreased net income for the year combined with the effects of increases in working capital and other non-current assets.

#### **ACCOUNTS RECEIVABLE**

Accounts receivable were \$88.0 million as of December 31, 2002 and \$80.9 million as of December 31, 2001; an increase of \$7.1 million. In 2002, \$5.4 million of the increase in receivables was due to weakening of the dollar in relation to currencies of our foreign subsidiaries and the remainder was due to slower payment from customers in the economic downturn. Our days sales outstanding, or DSO, calculated on a quarterly basis, deteriorated from 77 days in the fourth quarter of 2001 to 95 days in the fourth quarter of 2002. Accounts receivable were \$80.9 million as of December 31, 2001 and \$82.6 million as of December 31, 2000; a decrease of \$1.7 million. The decrease in receivables in 2001 was due to improved collections.

#### **INVENTORIES**

Inventories were \$88.7 million as of December 31, 2002 and \$76.5 million as of December 31, 2001; an increase of \$12.2 million. \$10.6 million of the increase was due to currency changes, as our foreign currency denominated inventories are translated into U.S. dollars. The remaining increase primarily was due to the acquisition of assets from Atomika Instruments GmbH, and an increase in work-in-process inventories.

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#### MANAGEMENT'S DISCUSSION AND ANALYSIS

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Inventories were \$76.5 million as of December 31, 2001 and \$59.8 million as of December 31, 2000; an increase of \$16.7 million. The increase was primarily due to increased production materials on hand, which included our 300 mm product line, and an increase in loaner systems at key customer accounts where we were jointly developing applications.

#### **CURRENT LIABILITIES**

Current liabilities were \$128.3 million as of December 31, 2002 and \$130.8 million as of December 31, 2001; a decrease of \$2.5 million. The decrease was a result of payment of income taxes, accrued payroll liabilities and other current liabilities, offset by increases in accounts payable, current account with Philips and the addition of accrued restructuring and reorganization expenses. Current liabilities were \$130.8 million as of December 31, 2001 and \$110.0 million as of December 31, 2000; an increase of \$20.8 million. The increase was a result of overall growth in our business, and is reflected in increased liabilities for deferred revenue, income taxes and other current liabilities.

#### Cash Flows from Investing Activities

Investing activities used cash of \$34.8 million in 2002, \$144.5 million in 2001 and \$17.6 million in 2000. We use cash in investing activities primarily to purchase investments, acquire property, plant and equipment, develop software that is sold with our equipment, and to make investments in and acquisitions of other companies. The significant use of cash in investing activities in 2001 principally reflected our investment of \$118.8 million of the cash received from our convertible debt and common stock offerings in 2001 and acquisitions of property, plant and equipment of \$22.2 million.

#### ACQUISITION OF PROPERTY, PLANT AND EQUIPMENT

We incurred capital expenditures for acquisition of property, plant and equipment of \$38.4 million in 2002, \$22.1 million in 2001 and \$13.9 million in 2000.

On July 30, 2002, we purchased land and two buildings in Hillsboro, Oregon, which, after improvements are completed, are expected to cost a total of approximately \$25.0 to \$27.0 million. We currently lease the real property used in our business, but we plan to vacate our leased facilities in Oregon and consolidate our operations into these newly purchased facilities. During the transition from leased facilities to our new Hillsboro facility, we expect to incur some increased costs in the first half of 2003 for moving and temporarily maintaining duplicate facilities. The remaining expenditures in 2002, 2001 and 2000 included application laboratory and demonstration systems, which exhibit the capabilities of our equipment to our customers and potential customers. We have expanded our demonstration capabilities over the last three years. We also invest in equipment for development, manufacturing and testing purposes. We expect to continue to invest in capital expenditures to further expand our business, particularly for demonstration equipment and loaner systems.

#### SOFTWARE DEVELOPMENT COSTS

We invest in internally developed software, which controls our equipment and provides information from the equipment for use by customers. We capitalized software development costs of \$5.8 million in 2002, \$2.0 million in 2001 and \$2.4 million in 2000. We also expect to continue to invest in software development as we develop new software for our existing products and new products under development.

#### INVESTMENTS AND ACQUISITIONS

During 2002 and 2001 we made several investments in businesses, in addition to ongoing investments in equipment and product development.

In the first quarter of 2002, we invested \$1.0 million for a small equity position in a start-up company that manufactures metrology equipment for the semiconductor manufacturing industry. During the second quarter of 2002, we purchased all of the assets and assumed certain liabilities of Atomika Instruments GmbH, a supplier of secondary ion mass spectrometry equipment for \$1.0 million in cash and the assumption of \$1.5 million in liabilities. In the fourth quarter of 2002, we invested \$0.1 million for a small equity position in a start-up company owned by a previous employee.

In April 2001, we acquired all of the outstanding common stock of Deschutes Corporation. The original purchase price of \$3.0 million included \$0.7 million of cash, 51 thousand shares of FEI common stock valued at \$1.3 million and \$1.1 million of liabilities assumed. In 2002, an additional \$0.4 million was paid (consisting of 8 thousand shares of our common stock, valued at \$0.2 million, and \$0.2 million of cash). The purchase price may be increased by an additional amount of up to \$0.2 million (consisting of 4 thousand shares of our common stock valued at \$0.1 million and \$0.1 million of cash) if certain milestones are met within 24 months after closing. In August 2001, we purchased all of the assets and assumed certain liabilities of Surface/Interface, Inc., a start-up company, which introduced a stylus probe nanoprofilometer, similar to an atomic force microscopy tool for the semiconductor industry. The purchase price of \$12.4 million included \$0.8 million cash, 132 thousand shares of FEI common stock valued at \$5.0 million, the assumption of \$4.1 million of Surface/Interface's liabilities and the adjusted value of our previous investment and advances to Surface/Interface of \$2.5 million.

We expect to continue to make investments and acquisitions in the future that are consistent with our business strategy.

#### Cash Flows from Financing Activities

Financing activities generated cash of \$5.3 million in 2002 and \$234.0 million in 2001 and used \$6.2 million in 2000. We have generated cash from financing activities primarily through the issuance of convertible debt and common stock, borrowings under our credit facilities and proceeds from our employee stock plans. Our increased cash flows in 2001 primarily reflected the \$257.1 million in proceeds of our convertible debt and common stock offerings, less the use of \$26.0 million of these proceeds to pay down existing indebtedness. Our use of cash in 2000 primarily reflected our repayment of \$10.7 million in indebtedness, repurchase of \$0.7 million of common stock, offset by \$4.7 million in proceeds from employee stock plans.

#### **CREDIT FACILITIES**

On July 30, 2001, we terminated our \$75.0 million credit facility with Philips and repaid the outstanding balance of \$26.0 million in full.

#### CONVERTIBLE DEBT OFFERING

On August 3, 2001, we issued \$175 million of convertible subordinated notes, due August 15, 2008, through a private offering. Our proceeds, net of underwriting discounts, commissions and debt issuance expenses, totaled \$169.1 million. The notes are redeemable at our option beginning in 2004 or earlier if the price of our common stock exceeds specified levels. The notes bear interest at 5.5%, payable semi-annually, and are convertible into our common stock, at the note holder's option, at a price of \$49.52 per share at any time up through their maturity.

#### COMMON STOCK OFFERING

On May 22, 2001, we completed a public offering of 3.1 million shares of common stock sold by us and 6.1 million shares of common stock sold by Philips. Our proceeds, net of underwriting discounts, commissions and offering expenses, totaled \$88.0 million. We used \$26.0 million of the proceeds from this stock offering to pay off the Philips line of credit.

#### **EMPLOYEE STOCK PLANS**

We also issue shares under our employee stock purchase plan, which enables employees to purchase our stock at a 15% discount to market price at fixed points in time. In addition, we grant options to purchase our shares to many of our employees and directors as part of incentive and other compensation programs. During 2002, 0.9 million shares were sold or granted

under these programs as compared to 1.0 million shares sold or granted in 2001 and 0.6 million shares sold or granted in 2000. These programs generated cash of \$5.3 million in 2002, \$3.6 million in 2001 and \$4.7 million in 2000.

#### STOCK REPURCHASES

From time to time, we have repurchased our common stock in the open market and retired the shares. On September 18, 2001, we announced a program to repurchase up to 2.0 million shares of our common stock. The program expired in 2002. In 2002, we did not repurchase any shares of our common stock under this program. In 2001, we repurchased and retired 50 thousand shares of our common stock at a total cost of \$1.0 million under this program. In 2000, we repurchased and retired 22 thousand shares of our common stock at a total cost of \$0.7 million.

#### CAPITAL COMMITMENTS

Our future capital commitments include the repayment of our convertible debt in 2008, obligations under operating leases for our manufacturing and administrative facilities, and certain purchase commitments.

The lease agreements governing our operating leases generally provide for payment of base rental amounts plus our share of property taxes and common area costs. The leases generally provide renewal options at current market rates. Rent expense is recognized on a straight-line basis over the terms of the leases. Rent expense was \$7.5 million in 2002, \$6.4 million in 2001 and \$5.0 million in 2000.

The following table shows our estimated future capital commitments as of December 31, 2002 (in thousands):

Year Ended December 31,	2003	2004	2005	2006	2007	Thereafter	Total
Debt repayments <sup>1</sup>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 175,000	\$ 175,000
Operating leases <sup>2</sup>	7,230	6,679	5,553	4,540	3,926	1,761	30,279
Purchase commitments <sup>2</sup>	2,962	-	_	-	_	_	2,962

<sup>&#</sup>x27;Holders of this convertible debt may require us to repurchase the notes prior to maturity in the event of a change of control, as further described in the note indenture.

## STANDBY LETTERS OF CREDIT AND BANK GUARANTEES

In addition, we issue standby letters of credit and bank guarantees from time to time in the normal course of our business.

The following table shows the expiration periods for the standby letters of credit and bank guarantees we had outstanding at December 31, 2002 (in thousands):

Year Ended December 31,	 2003	2004	 2005	 2006	 2007	reafter	 Total
Standby letters of credit and bank guarantees¹ Lease guarantees¹	\$ 9,727 808	\$ 294 48	\$ 16	\$ _	\$ -	\$ 293	\$ 10,330 856

¹These contingent obligations are not reflected on the consolidated balance sheet under accounting principles generally accepted in the U.S.

#### RELATED PARTY ACTIVITY

Additional discussion of related party transactions is included in Note 12 to the consolidated financial statements included elsewhere in this report.

**PHILIPS** In the past, we derived significant benefits from our relationship with Philips. Now that Philips' ownership of our common stock has been reduced to approximately 25%, we have begun to incur additional labor and operating costs. These increased costs began to be incurred on May 22, 2001 and vari-

ous components of these cost increases will be phased in over time. These costs will be partially offset by payments to us from Philips totaling up to \$6 million over a three-year period ending December 31, 2003 pursuant to our agreement with Philips. During 2001, we recognized \$1.4 million of these payments as a reduction to operating expenses and recognized increased operating expenses of approximately the same amount. During 2002, the recognition of payments from Philips as cost reductions was accelerated due to the anticipated merger with Veeco.

<sup>&</sup>lt;sup>2</sup>These non-cancelable operating lease and purchase commitments are not reflected on the consolidated balance sheet under accounting principles generally accepted in the U.S.

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#### MANAGEMENT'S DISCUSSION AND ANALYSIS

Continued

We recognized \$3.7 million of these payments as a reduction to operating expenses in 2002. Below is a table summarizing the benefits derived from the relationship with Philips and the estimated impact on operations we have experienced and will experience as a result of the reduction in Philips' ownership of our common stock.

Certain Philips business units purchase our products and services for internal use. Sales to Philips amounted to \$1.5 million, \$3.1 million and \$9.5 million during 2002, 2001 and 2000, respectively.

A substantial portion of the subassemblies included in our FIBs, TEMs and SEMs are purchased from Philips Enabling Technologies Group. Materials purchases from Philips and its affiliates amounted to \$27.8 million in 2002, \$32.1 million in 2001 and \$26.4 million in 2000.

### BENEFITS DERIVED AND IMPACT ON OPERATIONS Access to Philips' patents and intellectual property

There was no impact on our operations in 2002 or 2001. We cannot estimate the amount by which our revenues might decrease as a result of patent infringement claims or our operational costs may increase as a result of any potential required future royalty payments or possible litigation expenses.

#### Research and development services

There was no impact on our operations in 2002 or 2001. The hourly rate for research and development services provided by Philips to FEI has increased by approximately 40% effective January 1, 2002. There was no overall increase in costs, however, because we reduced the hours of service purchased.

Participation in Philips' collective hargaining agreements and

## Participation in Philips' collective bargaining agreements and pension plans

We began to incur increased pension costs on September 1, 2001. The impact on our operations in 2002 was \$5.0 million of additional costs, and in 2001 was \$1.6 million of additional costs. We expect the annualized pension related costs in the Netherlands to continue at approximately the same amount per year as 2002. This cost increase affects our Consolidated Statement of Operations in the following approximate percentages: increases of 40% in cost of sales, 35% in research and development and 25% in selling, general and administrative. *Participation in Philips' insurance programs* 

Our annual insurance costs increased by approximately \$1.2 million per year effective May 22, 2001, or \$0.6 million in 2001, since we ceased to participate in Philips' insurance programs. Some of this increase is attributable to changes in policy coverage and insurance market conditions. This increase primarily affects selling, general and administrative expenses in our Consolidated Statement of Operations. Considering the current insurance market, these costs will increase further in subsequent periods, but also would have increased under Philips' programs. *Payments by Philips* 

Philips has agreed to pay us up to \$6 million over a three-year period ending December 31, 2003. These payments represent (i) partial reimbursement of an over-funding of our pension liability to the Philips pension plan, which was not transferred to us at the time our employees transferred out of the Philips

pension plan and (ii) partial reimbursement for lost refunds we were previously receiving from the Philips plan due to the overfunding. These payments are recorded as a reduction of expenses. We recognized \$3.7 million of these payments as a reduction in expense in 2002 and \$1.4 million in 2001. The remainder of these payments may be recognized in 2003. This cost reduction affects our Consolidated Statement of Operations in the following approximate percentages: decreases of 40% in cost of sales, 35% in research and development and 25% in selling, general and administrative.

#### Use of Philips credit facility

As a result of the reduction in Philips' ownership, our credit facility with Philips was terminated in July 2001. As a result, we have a cost savings of approximately \$0.1 million per year in fees, beginning in July 2001. In addition, we no longer incur interest on any borrowings from Philips. If we were to replace the credit facility with an external bank facility, the cost most likely would be higher than the amount we paid to Philips. Access to Philips' export and purchasing services

The benefits we received from these arrangements cannot be quantified, but we believe that the costs of procuring these goods and services on a stand-alone basis are slightly higher than the costs under the Philips arrangements. There was little impact on our operations in 2002 or 2001.

#### Access to Philips' information technology systems

There was no impact on our operations in 2002 or 2001. We replaced the Philips' information technology systems with our own systems at no additional cost.

#### Other

There are a variety of other arrangements, such as legal, tax and administrative services that were provided by Philips. Most of these arrangements will change, some of which may result in additional costs. We cannot estimate, however, the amount by which our operational costs may increase as a result of any changes to these arrangements. There was little impact on our operations in 2002 or 2001.

ACCUREL Our Chairman, President and Chief Executive Officer owns a 50 percent interest in Accurel Systems International Corp., or Accurel, a provider of metrology services to the semiconductor and data storage markets. In 2002, we sold three systems to Accurel for an aggregate purchase price of \$3.2 million. Accured was extended payment terms of 5 years at 7% interest for one system, 3 years at 6.5% interest for the second, and 2 years at 10.43% interest for the last. System sales to Accurel totaled \$0.5 million in 2001 and \$1.9 million in 2000. These transactions were reviewed and approved by the disinterested members of our board of directors. We also provide service to Accurel on these and other systems used by Accurel. Service revenue from Accurel was \$0.4 million in 2002, \$0.5 million in 2001 and \$0.5 million in 2000. In addition, we have guaranteed certain third party leases of Accurel, up to a maximum of \$0.5 million as of December 31, 2002.

Aggregate payments of \$0.14 million were due from Accurel on March 26, 2003 for the purchase of a Vectra 986+ circuit edit tool. As of March 26, 2003, no payments had been received. We are currently in discussions with Accurel regarding collection of these delinquent payments.

STOCK PURCHASE LOAN On June 25, 1998, we loaned \$1.1 million to our Chairman, President and Chief Executive Officer for the purchase of restricted FEI stock. The loan was originally due June 25, 2002 and bore interest at a rate of 5.58%. Effective June 25, 2002, our board of directors approved an amendment to the loan to extend the loan's due date to June 25, 2005 and to increase the interest rate to 5.75%.

## TERMINATED MERGER AGREEMENT WITH VEECO INSTRUMENTS INC.

On July 11, 2002, we entered into a merger agreement with Veeco Instruments Inc. On January 9, 2003, we jointly announced with Veeco that we would not proceed with the merger due to the difficult overall market and economic conditions, and the uncertain timing of an industry recovery. During 2002, \$6.8 million of legal, accounting and investment banking costs were incurred and expensed in connection with the proposed merger with Veeco.

#### RECENTLY ISSUED ACCOUNTING PRONOUNCEMENTS

We adopted SFAS No. 142, "Goodwill and Other Intangible Assets," on January 1, 2002. This statement requires discontinuing the amortization of goodwill and other intangible assets with indefinite useful lives. Instead, these assets are to be tested periodically for impairment and written down to their fair market value as necessary. Other than the cessation of amortization of goodwill, the adoption of SFAS No. 142 had no effect on our results of operations or cash flows for the year ended December 31, 2002. The amount of goodwill amortization expense was \$3.1 million for both the years ended December 31, 2000 and 2001. We completed impairment testing in November 2002 required by SFAS No. 142 and determined that there was no impairment to our existing goodwill. SFAS No. 142 did not affect the accounting treatment for our other purchased technology, such as existing technology and in-process research and development.

SFAS No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets," was issued in August 2001 and became effective January 1, 2002. SFAS No. 144 supersedes SFAS No. 121, "Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to be Disposed Of" and APB Opinion No. 30, "Reporting the Effects of Disposal of a Segment of a Business, and Extraordinary, Unusual and Infrequently Occurring Events and Transactions." SFAS No. 144 establishes a single accounting model for long-lived assets to be disposed of by sale and expands on the guidance provided by SFAS No. 121 with respect to cash flow estimations. The adoption of SFAS No. 144 did not have a material effect on our financial position, results of operations or cash flows.

On July 30, 2002, FASB issued SFAS No. 146, "Accounting for Costs Associated with Exit or Disposal Activities." SFAS No. 146 requires companies to recognize costs associated with exit or disposal activities when they are incurred rather than at the date of a commitment to an exit or disposal plan. SFAS No. 146 is to be applied prospectively to exit or disposal activities initiated after December 31, 2002. In the past, we have restructured from time to time, and this may occur in the future. All restructuring charges taken in the future will be expensed as incurred

in accordance with SFAS No. 146.

SFAS No. 148, "Accounting for Stock-Based Compensation -Transition and Disclosure," which amends FASB Statement No. 123, "Accounting for Stock-Based Compensation," was issued in December 2002. This statement provides alternative methods of transition for a voluntary change to the fair value based method of accounting for stock-based employee compensation. In addition, SFAS No. 148 amends the disclosure requirements of SFAS No. 123 to require more prominent and more frequent disclosure in financial statements about the effects of stockbased compensation. We have chosen to account for stockbased compensation using the intrinsic value method prescribed by APB No. 25. The provisions of this statement are effective for fiscal years ended after December 15, 2002. Thus, we have adopted the disclosure provisions of SFAS No. 148 for the year ended December 31, 2002. As the adoption of this provision involves disclosures only, we do not expect a material impact on our financial position or results of operations.

In December 2002, FASB issued Financial Interpretation No. 45, "Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others." Financial Interpretation No. 45 elaborates on the existing disclosure requirements for most guarantees, including loan guarantees such as standby letters of credit. It also clarifies that at the time a company issues a guarantee, the company must recognize an initial liability for the fair value, or market value, of the obligations it assumes under that guarantee and must disclose that information in its interim and annual financial statements. Financial Interpretation No. 45 is to be applied prospectively to guarantees issued or modified after December 31, 2002. The disclosure requirements in this interpretation are effective for financial statements of interim or annual periods ending after December 15, 2002. We have adopted the disclosure provisions of FIN 45. We are evaluating Financial Interpretation No. 45, and have not yet determined the impact of adoption on our financial position, results of operations, or cash flows.

In January 2003, FASB issued Financial Interpretation No. 46, "Consolidation of Variable Interest Entities." Variable interest entities have been commonly referred to as special-purpose entities or off-balance sheet structures. The purpose of Financial Interpretation No. 46 is to improve financial reporting by enterprises involved with variable interest entities by requiring consolidation of such entities. Financial Interpretation No. 46 is to be applied immediately to variable interest entities created after January 31, 2003. The consolidation requirements apply to older entities in the first fiscal year or interim period beginning after June 15, 2003. Certain of the disclosure requirements apply in all financial statements issued after January 31, 2003, regardless of when the variable interest entity was established. We do not believe the adoption of this statement will have a material impact on our financial position, results of operations, or cash flows.

#### MANAGEMENT'S DISCUSSION AND ANALYSIS

Continued

#### BACKLOG

Our backlog consists of purchase orders we have received for products and services we expect to ship and deliver within the next twelve months, although there is no assurance that we will be able to do so. At December 31, 2002, our total backlog was \$124 million. At December 31, 2001, our total backlog was \$136 million; a decrease of \$12 million or 8.8%, consistent with the overall decline in net sales. Customers may cancel or delay delivery on previously placed orders, although our standard terms and conditions include penalties for cancellations made close to the scheduled delivery date. A substantial portion of our backlog relates to orders for products with a relatively high average selling price. As a result, the timing of the receipt of orders or the shipment of products could have a significant impact on our backlog at any date. For this and other reasons, the amount of backlog at any date is not necessarily indicative of revenue in future periods.

### QUARTERLY RESULTS OF OPERATIONS — UNAUDITED

The following table presents unaudited consolidated financial data for each of the eight quarters in 2002 and 2001.

In our opinion, this information has been prepared on the same basis as the audited consolidated financial information appearing elsewhere in this report and includes all adjustments, consisting only of normal recurring adjustments necessary for a fair presentation of the financial position and results of operations for these periods. The operating results for any quarter are not necessarily indicative of results for any future period.

The results for each of the three months ended June 30, 2002, September 29, 2002 and December 31, 2002 include costs incurred in connection with the proposed merger with Veeco, which was terminated on January 9, 2003, in the amounts of \$1.1 million, \$2.7 million and \$3.0 million, respectively. The results for the three months ended December 31, 2002 include \$5.5 million of restructuring and reorganization costs. The results for the three months ended July 1, 2001 include a charge of \$3.7 million in other expense, net to adjust the carrying value of the investment in Surface/Interface as a result of the acquisition. The results of the three months ended September 30, 2001 include a charge of \$3.4 million in operating expenses for purchased in-process research and development associated with 2001 acquisitions.

			2002	
	March 31	June 30	September 29	December 31
Net sales	\$ 84,498	\$ 87,881	\$ 83,809	\$ 85,193
Cost of sales	44,652	47,967	48,604	50,345
Gross profit	39,846	39,914	35,205	34,848
Total operating expenses	29,278	30,873	31,940	39,108
Operating income (loss)	10,568	9,041	3,265	(4,260)
Other expense, net	(1,234)	(1,385)	(1,029)	(1,298)
Income (loss) before taxes	9,334	7,656	2,236	(5,558)
Income tax expense (benefit)	3,407	2,794	817	(2,028)
Net income (loss)	\$ 5,927	\$ 4,862	\$ 1,419	\$ (3,530)
Income (loss) per share:	<del></del>	<del></del>	<u></u>	
Basic	\$ 0.18	\$ 0.15	\$ 0.04	\$ (0.11)
Diluted	\$ 0.18	\$ 0.15	\$ 0.04	\$ (0.11)
Shares used in per share calculation:				
Basic	32,126	32,341	32,427	32,457
Diluted	33,477	33,411	33,220	32,457

			2001 ————	
	April 1	July 1	September 30	December 31
Net sales	\$ 93,515	\$ 94,042	\$ 91,880	\$ 96,567
Cost of sales	48,572	46,352	47,105	51,583
Gross profit	44,943	47,690	44,775	44,984
Total operating expenses	_28,059	30,905	32,849	31,505
Operating income	16,884	16,785	11,926	13,479
Other expense, net	(195)	(2,724)	(785)	(370)
Income before taxes	16,689	14,061	11,141	13,109
Income tax expense	6,466	5,493	5,532	5,003
Net income	\$ 10,223	\$ 8,568	\$ 5,609	\$ 8,106
Income per share:	<del></del>		<del></del>	
Basic	\$ 0.36	\$ 0.29	\$ 0.18	\$ 0.25
Diluted	\$ 0.34	\$ 0.27	\$ 0.17	\$ 0.24
Shares used in per share calculation:				
Basic	28,686	29,951	31,844	32,055
Diluted	29,976	31,336	33,332	33,416

### QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

The following discusses our exposure to market risk related to changes in foreign currency exchange rates and interest rates.

#### Foreign Currency Exchange Rate Risk

A large portion of our business is conducted outside of the U.S. through a number of foreign subsidiaries. Each of the foreign subsidiaries keeps its accounting records in its respective local currency. These local currency denominated accounting records are translated at exchange rates that fluctuate up or down from period to period and consequently affect the consolidated results of operations and financial position. The major foreign currencies in which we face periodic fluctuations are the euro, the Czech koruna, the Japanese yen and the British pound sterling. Although for each of the last three years more than 55% of our sales occurred outside of the U.S., a large portion of these foreign sales were denominated in U.S. dollars and euros. Because of our substantial research, development and manufacturing operations in Europe, we incur a greater proportion of our costs in Europe than the revenue we derive from sales in that geographic region. Our raw materials, labor and other manufacturing costs primarily are denominated in U.S. dollars, euros and Czech korunas. This situation has the effect of improving our gross margins and results of operations when the dollar strengthens in relation to the euro or koruna, as was the case in 2000 and 2001. A weakening of the dollar in relation to the euro or Czech koruna would have an adverse effect on our reported results of operations, as was the case in 2002. Movement of Asian currencies in relation to the dollar and euro also can affect our reported sales and results of operations because we derive more revenue than we incur costs from the Asia Pacific region. In addition, several of our competitors are based in Japan and a weakening of the Japanese yen has the effect of lowering their prices relative to ours.

As a result of an overall weakening of the U.S. dollar against European currencies and Japanese yen in 2002, net sales were positively affected. As a result of an overall strengthening of the U.S. dollar against European currencies and Japanese yen in 2001, net sales were negatively affected. Assets and liabilities of foreign subsidiaries are translated using the exchange rates in effect at the balance sheet date. The resulting translation adjustments increased shareholders' equity and comprehensive income for 2002 by \$13.7 million. Holding other variables constant, if the U.S. dollar weakened by 10%, shareholders' equity would increase by approximately \$12.5 million.

We attempt to mitigate our currency exposures for recorded transactions by using forward exchange contracts. The purpose of these activities is to reduce the risk that future cash flows of the underlying assets and liabilities will be adversely affected by changes in exchange rates. We also negotiate the selling currency for our products with our customers to reduce the impact of currency fluctuations. We do not, however, enter into derivative financial instruments for speculative purposes. From time to time, we enter into forward sale or purchase contracts for foreign currencies to hedge specific receivables or payables positions. As of December 31, 2002, the aggregate stated

amount of these contracts was \$51.6 million. Holding other variables constant, if the U.S. dollar weakened by 10%, the market value of foreign currency contracts outstanding as of December 31, 2002 would decrease by approximately \$1.9 million. The decrease in value would be substantially offset by the revaluation of the underlying hedged transactions.

#### Interest Rate Risk

Our exposure to market risk for changes in interest rates relate primarily to our investment. Since we have no variable interest rate debt outstanding at December 31, 2002, we would not experience a material impact on our results of operations, financial position or cash flows as the result of a one percent increase in interest rates. The primary objective of our investment activities is to preserve principal while maximizing yields without significantly increasing risk. This is accomplished by investing in diversified investments, consisting only of investment grade securities.

CALIBRATIO ALLE MINESTERNATION

As of December 31, 2002, we held cash and cash equivalents of \$167.4 million that consist of cash and highly liquid short-term investments having original maturity dates of no more than 90 days. Declines of interest rates over time would reduce our interest income from our highly liquid short-term investments. A decrease in interest rates of one percent would cause a corresponding decrease in our annual interest income by approximately \$2 million. Due to the nature of our highly liquid cash equivalents, an increase in interest rates would not materially change the fair market value of our cash and cash equivalents.

As of December 31, 2002, we held short and long-term fixed rate investments of \$106.2 million that consisted corporate notes and bonds and mortgaged-backed securities. An increase or decrease in interest rates would not have a material impact on our results of operations, financial position or cash flows, as we have the intent and ability to hold these fixed rate investments until maturity. Declines in interest rates over time would reduce our interest income from our short-term investments, as our short-term portfolio is invested at current market interest rates. A decrease in interest rates of one percent would cause a corresponding decrease in our annual interest income from these items of less than \$1 million.

The following summarizes our investments, weighted average yields and expected maturity dates as of December 31, 2002 (in thousands, except interest rates):

· ·	,		
	2003	2004	Total
Corporate notes			
and bonds	\$ 47,142	\$ 6,713	\$ 53,855
Weighted average yield	2.95%	3.24%	2.99%
Mortgage-backed			
Securities	7,034	45,318	52,352
Weighted average yield	2.01%	2.57%	2.49%
Total investment			
securities	\$ 54,176	\$ 52,031	\$ 106,207

## CONSOLIDATED BALANCE SHEETS (In Thousands)

December 31,	2001	2002
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 176,862	\$ 167,423
Short-term investments in marketable securities	118,814	<b>54,176</b>
Receivables, net	80,899	87,993
Current accounts with Philips	2,401	_
Current receivable from Accurel	111	1,118
Inventories	76,533	88,692
Deferred income taxes	16,900	18,934
Other current assets	7,300	7,530
Total current assets	479,820	425,866
Non-current investments in marketable securities	-	52,031
Long-term receivable from Accurel	-	2,238
Property, plant and equipment	34,526	56,702
Purchased technology, net	30,680	25,863
Goodwill, net	32,497	32,859
Other assets	29,953	44,857
Total assets	\$ 607,476	<u>\$ 640,416</u>
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 27,569	\$ 35,179
Current account with Philips	_	5,629
Accrued payroll liabilities	13,042	8,522
Accrued warranty reserves	18,988	16,099
Deferred revenue	29,125	<b>29,741</b>
Income taxes payable	17,804	9,532
Accrued restructuring and reorganization	_	5,202
Other current liabilities	24,268	18,423
Total current liabilities	130,796	128,327
Convertible debt	175,000	175,000
Deferred income taxes	4,100	7,561
Other liabilities	1,064	2,603
Commitments and contingencies	· _	, _
Shareholders' equity		
Preferred stock – 500 shares authorized; none issued and outstanding	_	_
Common stock – 45,000 shares authorized; 32,053 and 32,647 issued		
and outstanding as of December 31, 2001 and 2002, respectively	317,140	325,203
Note receivable from shareholder	(1,116)	(1,116)
Accumulated deficit	(10,368)	(1,690)
Accumulated other comprehensive income (loss)	(9,140)	4,528
Total shareholders' equity	296,516	326,925
Total liabilities and shareholders' equity	\$ 607,476	\$ 640,416

#### CONSOLIDATED STATEMENTS OF OPERATIONS

(In thousands, except per share amounts)

Years Ended December 31,		2000		2001	**···	2002
Net sales:						
Products	\$	263,630	\$	317,841	\$	267,981
Products-related party		9,936		2,678		5,596
Service		44,721		53,936		67,273
Service-related party		2,013		1,549		531
Total net sales		320,300		376,004		341,381
Cost of sales:						
Products		144,557		150,733		144,952
Service		38,621		42,879		46,616
Total cost of sales		183,178		193,612		191,568
Gross profit		137,122		182,392		149,813
Operating expenses:						
Research and development		31,617		41,503		42,483
Selling, general and administrative		62,834		71,620		71,531
Amortization of purchased goodwill and technology		6,151		6,757		4,817
Purchased in-process research and development		_		3,438		-
Merger costs		-		_		6,839
Restructuring and reorganization costs						5,529
Total operating expenses		100,602		123,318		131,199
Operating income		36,520		59,074		18,614
Other income (expense):						
Interest income		879		4,662		6,809
Interest expense		(2,336)		(5,580)		(11,067)
Valuation adjustment		_		(3,718)		-
Other		(180)		562		(688)
Total other expense, net		(1,637)		(4,074)		(4,946)
Income before taxes and cumulative effect of change in						
accounting principle		34,883		55,000		13,668
Income tax expense		14,073		22,494		4,990
Income before cumulative effect of change in accounting principle		20,810		32,506		8,678
Cumulative effect of change in accounting principle, net of income						
tax benefit of \$4,405		(7,499)		<u> </u>		_
Net income	\$	13,311	\$	32,506	<u>\$</u>	8,678
Per share data:						
Basic:		•				
Income before cumulative effect of change in accounting principle	\$	0.74	\$	1.06	\$	0.27
Cumulative effect of change in accounting principle	Ψ	(0.27)	Ψ	-	•	-
Net income	\$	0.47	\$	1.06	\$	0.27
	====					
Diluted:	_	6 =0	_	- 05	-	
Income before cumulative effect of change in accounting principle Cumulative effect of change in accounting principle	\$	0.70 (0.25)	\$	1.02	\$	0.26
Net income	\$	0.45	\$	1.02	\$	0.26
Waighted average charge outstanding:		· ·				3
Weighted average shares outstanding: Basic		28,091		30.562		32,493
Diluted		,		30,563		
Diracca		29,827		31,986		33,460

#### CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

(In thousands)

Years Ended December 31,	 2000	2001	 2002
Net income	\$ 13,311	\$ 32,506	\$ 8,678
Other comprehensive income (loss):			
Foreign currency translation adjustment, zero taxes provided	(1,740)	1,128	13,668
Comprehensive income	\$ 11,571	\$ 33,634	\$ 22,346

## CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY (In thousands)

Years Ended December 31, 1999, 2000 and 2001	Common Stock Shares Amount			Note Receivable From Shareholder		Ac	Accumulated Deficit		Accumulated Other Comprehensive Income (Loss)		Total
BALANCE, JANUARY 1, 2000	27,544	\$	-	\$	(1,116)	\$	(56,185)	\$	(8,528)	\$	152,577
Net income	2,,011	4	_	Ψ	(1,110)	Ψ	13,311	*	(0,020)	4	13,311
Employee purchases of common stock							10,011				20,0
through employee stock purchase plan	189		1,404		_		_		_		1,404
Stock options exercised	389		3,250		_		_				3,250
Shares issued to Philips for pre-merger			0,-00								-,
options exercised	384		_		_		_		_		_
Sale of stock to Philips	5		144		_		_		_		144
Repurchase of common stock	(22)		(657)		_		_		_		(657)
Translation adjustment	`		_		_		_		(1,740)		(1,740)
BALANCE, DECEMBER 31, 2000	28,489		222,547		(1,116)		(42,874)		(10,268)		168,289
Net income	20,407				(1,110)		32,506		(10,200)		32,506
Employee purchases of common stock through employee stock			_				32,300				3 <b>2</b> ,300
purchase plan	120		2,065		_		_		-		2,065
Stock options exercised	211		1,553		-		-		-		1,553
Shares issued to Philips for pre-merger											
options exercised	22		-		-		-		-		_
Shares issued in public offering	3,067		87,994		_		_				87,994
PEO Combination resolution (Note 16)	-		(5,000)		-		_		-		(5,000)
Shares issued for acquisitions	194		6,588		-		-		-		6,588
Repurchase of common stock	(50)		(1,009)		-		-		-		(1,009)
Tax benefit of non-qualified stock											
options exercised	_		2,402		-		-		-		2,402
Translation adjustment			_		_				1,128		1,128
BALANCE, DECEMBER 31, 2001	32,053		317,140		(1,116)		(10,368)		(9,140)		296,516
Net income	_		_		_		8,678		_		8,678
Employee purchases of common stock through employee stock											
purchase plan	158		2,811		_		-		-		2,811
Stock options exercised	247		2,490		-		-		-		2,490
Shares issued to Philips for											
pre-merger options exercised Tax benefit of non-qualified	189		-		-		-		_		-
stock options exercised	_		2,762		-		-		-		2,762
Translation adjustment			-		-		-		13,668		13,668
BALANCE, DECEMBER 31, 2002	32,647	\$	325,203	\$	(1,116)	\$	(1,690)	\$	4,528	\$	326,925

## CONSOLIDATED STATEMENTS OF CASH FLOWS (In thousands)

Years Ended December 31,	2000	2001	2002
Cash flows from operating activities:			
Net income	\$ 13,311	\$ 32,506	\$ 8,678
Adjustments to reconcile net income to net cash			
provided by operating activities:			
Depreciation	10,359	13,194	13,742
Amortization	7,920	9,204	<b>7,48</b> 6
Purchased in-process research and development	-	3,438	-
Loss on retirement of fixed assets	176	354	335
Valuation adjustment	_	3,718	-
Deferred income taxes	(6,479)	(259)	1,427
Tax benefit of non-qualified stock options exercised	_	2,402	2,762
Decrease (increase) in assets:			
Receivables	(5,068)	1,663	(2,700)
Current accounts with Philips	(5,171)	(2,135)	10,618
Current receivable from Accurel	(984)	1,017	(1,007)
Inventories	3,074	(14,560)	4,553
Other assets	(732)	(4,925)	(16,703)
Increase (decrease) in liabilities:			
Accounts payable	11,320	(7,056)	3,941
Accrued payroll liabilities	4,758	473	(5,073)
Accrued warranty reserves	6,423	1,445	(4,361)
Deferred revenue	(590)	8,228	(1,728)
Income taxes payable	3,877	7,882	(9,750)
Accrued restructuring and reorganization costs	-	-	5,202
Other liabilities	(3,786)	5,607	(671)
Net cash provided by operating activities	38,408	62,196	16,751
Cash flows from investing activities:			
Acquisition of property, plant and equipment	(13,901)	(22,122)	(38,413)
Investment in software development	(2,413)	(2,005)	(5,767)
Investment in unconsolidated affiliate	(1,250)	_	(1,115)
Purchase of investments in marketable securities	_	(118,814)	(230,287)
Redemption of investments in marketable securities	-	_	242,894
Acquisition of patents	-	(200)	(728)
Acquisition of businesses, net of cash acquired	_	(1,400)	(1,374)
Net cash used in investing activities	(17,564)	(144,541)	(34,790)
Cash flows from financing activities:			
Net proceeds from (repayments of) bank lines of credit	342	(1,534)	_
Net repayments under credit facility with Philips	(10,680)	(24,140)	-
Proceeds from convertible debt offering, net of expenses	-	169,119	_
Proceeds from common stock offering, net of expenses	_	87,994	_
Proceeds from exercise of stock options and employee stock purchases	4,654	3,618	5,301
Proceeds from sale of stock to Philips	144	-	-
Repurchase of common stock	(657)	(1,009)	_
Net cash provided by (used in) financing activities	(6,197)	234,048	5,301
Effect of exchange rate changes	(1,740)	1,128	3,299
	<del></del>		
Net increase (decrease) in cash and cash equivalents  Cash and cash equivalents, beginning of year	12,907 11,124	152,831 24,031	(9,439) 176 862
			176,862
Cash and cash equivalents, end of year	\$ 24,031	\$ 176,862	<u>\$ 167,423</u>

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(In Thousands)

### Summary of Significant accounting Policies

NATURE OF BUSINESS FEI Company and its wholly-owned subsidiaries ("FEI" or the "Company") design, manufacture, market and service products based on focused charged particle beam technology. The Company's products include transmission electron microscopes ("TEMs"), scanning electron microscopes ("SEMs"), focused ion-beam systems ("FIBs") and DualBeam systems that combine a FIB column and a SEM column on a single platform. The Company also designs, manufactures and sells some of the components of electron microscopes and FIBs to other manufacturers. The Company has research, development and manufacturing operations in Hillsboro, Oregon; Peabody, Massachusetts; Sunnyvale, California; Eindhoven, the Netherlands; Munich, Germany; and Brno, Czech Republic. Sales and service operations are conducted in the United States of America ("U.S.") and 28 other countries located throughout North America, Europe and the Asia Pacific Region. The Company also sells its products through independent agents and representatives in various additional countries. The Company's products are sold to semiconductor manufacturers, thin film head manufacturers in the data storage industry and to industrial, institutional and research organizations in the life sciences and material sciences fields.

**BASIS OF PRESENTATION** The consolidated financial statements include the accounts of the Company and all of its whollyowned subsidiaries. All significant intercompany balances and transactions have been eliminated in consolidation.

USE OF ESTIMATES IN FINANCIAL REPORTING The preparation of financial statements in conformity with accounting principles generally accepted in the U.S. requires management to make estimates and assumptions. These estimates and assumptions affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amount of revenues and expenses during the reporting period. Significant estimates underlying the accompanying consolidated financial statements include the allowance for doubtful accounts, reserves for excess or obsolete inventory, restructuring and reorganization costs, warranty liabilities, income tax related contingencies, the lives and recoverability of equipment and other long-lived assets such as existing technology intangibles and goodwill, and the timing of revenue recognition. It is reasonably possible the estimates may change in the near future.

concentration of credit risk Instruments that potentially subject the Company to concentration of credit risk consist principally of cash and cash equivalents, short-term investments and receivables. The Company's investment policy limits investments with any one issuer to five percent or less of the total investment portfolio, with the exceptions of money market funds which may comprise up to 25 percent of the total investment portfolio and securities issued by the U.S. government or its agencies which may comprise up to 100 percent of the total investment portfolio. The Company's exposure to credit risk concentrations within its receivables balance is limited due to the large number of entities comprising the

Company's customer base and their dispersion across many different industries and geographies.

DEPENDENCE ON KEY SUPPLIERS Although many of the components and subassemblies included in the Company's system products are standard products, a significant portion of the mechanical parts and subassemblies are custom made by one or two suppliers, including Philips Enabling Technologies Group B.V. ("Philips Enabling Technologies Group"). A second supplier, Nu-Way Electronics, Inc., is currently a sole source for electronic sub-assemblies that were previously manufactured at the Company's facilities in Eindhoven. In addition, the Company obtains a significant portion of its component parts from a limited number of suppliers. The Company believes some of the components supplied to it are available to the suppliers only from single sources. Those parts subject to single or limited source supply are monitored by the Company to ensure that adequate sources are available to maintain manufacturing schedules. Although the Company believes it would be able to develop alternate sources for any of the components used in its products, significant delays or interruptions in the delivery of components from suppliers or difficulties or delays in shifting manufacturing capacity to new suppliers could have a material adverse effect on the Company. In the ordinary course of business, the Company continually evaluates its existing suppliers and potential different or additional suppliers to determine whether changes in suppliers may be appropriate. FOREIGN CURRENCY TRANSLATION Assets and liabilities denominated in a foreign currency, where the local currency is the functional currency, are translated to U.S. dollars at the

FOREIGN CURRENCY TRANSLATION Assets and liabilities denominated in a foreign currency, where the local currency is the functional currency, are translated to U.S. dollars at the exchange rate in effect on the respective balance sheet date. Gains and losses resulting from the translation of assets, liabilities and equity are included in accumulated other comprehensive income (loss) on the consolidated balance sheet. Transactions representing revenues, costs and expenses are translated using an average rate of exchange for the period. Realized and unrealized foreign currency transaction gains and losses are included in the consolidated statements of operations as other income (expense) and aggregated \$(267) in 2000, \$833 in 2001 and \$(309) in 2002.

FORWARD EXCHANGE CONTRACTS Most of the Company's subsidiaries transact some business in currencies other than their functional currencies. As a result, changes in foreign currency exchange rates may have an impact on the Company's operating results. Forward exchange contracts are used to offset a portion of the risk of foreign currency fluctuations. The Company does not hold or issue derivative financial instruments for trading purposes. The purpose of the Company's hedging activities is to reduce risk that the eventual cash flows of the underlying assets and liabilities will be adversely affected by changes in exchange rates. The Company accounts for such forward exchange contracts in accordance with Statement of Financial Accounting Standards ("SFAS") No. 133, "Accounting for Derivative Instruments and Hedging Activities." Accordingly, realized and unrealized gains and losses on such contracts are recognized in the consolidated statements of operations concurrent with the related transactions. The related assets and liabilities at December 31, 2002 are not material.

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Continued

ASSET IMPAIRMENT The Company evaluates the remaining life and recoverability of equipment and other assets, including intangible assets, whenever events or changes in circumstances indicate that the carrying amount of the asset may not be recoverable. If there is an indication of impairment, the Company prepares an estimate of future, undiscounted cash flows expected to result from the use of the asset and its eventual disposition. If these cash flows are less than the carrying value of the asset, the Company adjusts the carrying amount of the asset to its estimated fair value. Goodwill is evaluated for impairment annually or whenever changes in circumstances indicate that its carrying amount may not be recoverable.

CASH AND CASH EQUIVALENTS Include cash deposits in banks, money market funds and other highly liquid marketable securities with original maturities of three months or less at the date of acquisition.

**INVESTMENTS** Investments represent marketable debt securities with maturities greater than three months at the time of purchase. All such investments are classified as held-to-maturity and, accordingly, are carried at amortized cost on the consolidated balance sheet. Investments with maturities greater than 12 months from the balance sheet date are classified as noncurrent investments. Non-current investments at December 31, 2002 mature at varying dates through December 13, 2004. INVENTORIES Inventories are stated at lower of cost or market with cost determined by standard cost methods, which approximate the first-in, first-out method. Inventory costs include material, labor and manufacturing overhead. Service inventories that exceed the estimated requirements for the next 12 months based on recent usage levels are reported as other assets. Management has established inventory reserves based on estimates of excess and/or obsolete current and noncurrent inventory.

**DEFERRED INCOME TAXES** Deferred income taxes are provided for temporary differences between the amounts of assets and liabilities for financial and tax reporting purposes. Deferred tax assets are reduced by a valuation allowance when it is estimated to be more likely than not that some portion of the deferred tax assets will not be realized.

PROPERTY, PLANT AND EQUIPMENT Land is stated at cost. Buildings and improvements are stated at cost and depreciated over estimated useful lives of approximately thirty-five years using the straight-line method. Equipment, including systems used in research and development activities, production and in demonstration laboratories, is stated at cost and depreciated over estimated useful lives of approximately three to seven years using the straight-line method. Leasehold improvements are amortized over the shorter of their economic lives or the lease term. Maintenance and repairs are expensed as incurred.

PURCHASED GOODWILL AND TECHNOLOGY Purchased goodwill, which represents the excess of cost over the fair value of net assets acquired, was amortized through December 31, 2001 on a straight-line basis over the estimated economic lives for acquisitions made before July 1, 2001. For acquisitions made after June 30, 2001, purchased goodwill is not amortized. See also "Recently Issued Accounting Pronouncements" below. Existing technology intangible assets purchased in a business combination, which represent the estimated value of products utilizing technology existing as of the combination date discounted to their net present value, are amortized on a straightline basis over the estimated useful life of the technology. The value of purchased in-process research and development in a business combination, which represents the net present value of products under development as of the combination date, is expensed immediately following the date of business combination. Changes in technology could affect the Company's estimate of the useful lives of such assets. See Note 2.

**SOFTWARE DEVELOPMENT COSTS** The Company capitalizes certain software development costs for software expected to be sold with the Company's products. Such costs are capitalized after the technological feasibility of the project is determined and are reported on the balance sheet in other assets. Once the Company begins to include such software in its products, these costs are amortized over the estimated economic life of the software. Changes in technology could affect the Company's estimate of the useful life of such assets. See Note 7.

product warranty costs The Company's products generally carry a one-year warranty. A reserve is established at the time of sale to cover estimated warranty costs and certain commitments for product upgrades. The Company's estimate of warranty cost is based on its history of warranty repairs and maintenance. While most new products are extensions of existing technology, the estimate could change if new products require a significantly different level of repair and maintenance than similar products have required in the past.

**DEFERRED REVENUE** represents customer deposits on equipment orders and pre-paid service contract revenue.

REVENUE RECOGNITION AND CUMULATIVE EFFECT OF CHANGE IN ACCOUNTING PRINCIPLE For products produced according to the Company's published specifications, revenue is recognized when title to the product and the risks and rewards of ownership pass to the customer. For products produced according to a particular customer's specifications, revenue is recognized when the product meets the customer's specifications and when title and the risks and rewards of ownership have passed to the customer. In each case, the portion of revenue applicable to installation and customer acceptance is recognized upon meeting specifications at the installation site. For new applications of the Company's products where performance cannot be assured prior to meeting specifications at the installation site, no revenue is recognized until such specifications are met.

The Company also provides service for its products. Revenue from time and materials based service arrangements is recognized as the service is performed. Revenue from service contracts is recognized ratably over the term of such service contracts.

The Company's billing terms on TEMs, SEMs, FIBs and DualBeam systems generally include a holdback of 10 to 20 percent of the total purchase price subject to completion of installation and final acceptance process at the customer site. Effective January 1, 2000, the Company changed its revenue recognition policy to defer the portion of revenue related to installation and final acceptance until such installation and final acceptance are completed. This change was made in accordance with the implementation of U.S. Securities and Exchange Commission Staff Accounting Bulletin No. 101, "Revenue Recognition in Financial Statements" ("SAB 101"). Previously, the Company had recognized 100 percent of revenue for products at such time as the product specifications had been met and the title and risks and rewards of ownership had transferred to the customer since the Company has historically completed such installation services successfully and since such services have required minimal costs to complete. The effect of this change, net of income taxes, is reported as the cumulative effect of a change in accounting principle for the year ended December 31, 2000. This net effect reflects the deferral as of January 1, 2000 of \$8,442 of revenue previously recognized and the accrual of \$3,462 in cost of sales previously deferred. The Company recognized the \$8,442 in deferred revenue included in the cumulative effect adjustment as of January 1, 2000 during the year ended December 31, 2000.

**RESEARCH AND DEVELOPMENT** costs are expensed as incurred, except for capitalized software development costs (see above). **ADVERTISING COSTS** are expensed as incurred. The amount of advertising expense was \$2,716 in 2000, \$1,893 in 2001 and \$2,098 in 2002.

stock-based compensation The Company measures compensation expense for its stock-based employee compensation plans using the method prescribed by Accounting Principles Board Opinion No. 25, "Accounting for Stock Issued to Employees." The Company provides pro forma disclosures of net income and earnings per share as if the method prescribed by SFAS No. 123, "Accounting for Stock-Based Compensation," had been applied in measuring compensation expense.

No compensation cost has been recognized for stock options granted or ESPP shares issued at fair value on the date of grant or issuance. Had compensation cost for the Company's stock option and ESPP plans been determined based on the estimated fair value of the options or shares at the date of grant, the Company's net income and net income per share would have been reduced to the pro forma amounts shown as follows:

Year Ended December 31,	 2000		2001	 2002
Net income: As reported Compensation cost	\$ 13,311 2,337	\$ :	32,506 5,126	\$ 8,678 7,111
Pro forma Net income per share, basic:	10,974		27,380	 1,567
As reported Compensation cost	\$ 0.47 0.08	\$	1.06 0.16	\$ 0.27 0.22
Pro forma Net income per share, diluted:	0.39		0.90	 0.05
As reported Compensation cost	\$ $0.45 \\ 0.08$	\$	1.02 0.16	\$ 0.26 0.21
Pro forma	 0.37	_	0.86	 0.05

**SUPPLEMENTAL CASH FLOW INFORMATION** Cash paid for interest totaled \$1,836 in 2000, \$1,234 in 2001 and \$10,538 in 2002. Cash paid for income taxes totaled \$13,263 in 2000, \$14,673 in 2001 and \$11,835 in 2002. Issuance of common stock for acquisition of businesses was \$6,588 in the year ended December 31, 2001. Assumption of debt for acquisition of businesses was \$5,174 in 2001 and \$1,484 in 2002.

**RECLASSIFICATIONS** Certain reclassifications have been made to the prior year financial statements to conform to the current year presentation.

RECENTLY ISSUED ACCOUNTING PRONOUNCEMENTS The Company adopted Statement of Financial Accounting Standards ("SFAS") No. 142, "Goodwill and Other Intangible Assets," on January 1, 2002. The statement requires discontinuing the amortization of goodwill and other intangible assets with indefinite useful lives. Instead, these assets are to be tested periodically for impairment and written down to their fair market value as necessary. Other than the cessation of amortization of goodwill, the adoption of SFAS No. 142 had no effect on the Company's results of operations or cash flows for the year ended December 31, 2002. The amount of goodwill amortization expense was \$3,150 and \$3,149 for the years ended December 31, 2000 and 2001, respectively. The Company completed impairment testing as required by SFAS No. 142 and determined there was no impairment to its existing goodwill. SFAS No. 142 did not affect the accounting treatment for the Company's other purchased technology such as existing technology.

SFAS No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets," was issued in August 2001 and became effective January 1, 2002. SFAS No. 144 supersedes SFAS No. 121, "Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to be Disposed Of," and APB Opinion No. 30, "Reporting the Effects of Disposal of a Segment of a Business, and Extraordinary, Unusual and Infrequently Occurring Events and Transactions." SFAS No. 144 establishes a single accounting model for long-lived assets to be disposed of by sale and expands on the guidance provided by SFAS No. 121 with respect to cash flow estimations. The adoption of SFAS No. 144 did not have a material effect on the Company's financial position, results of operations or cash flows.

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Continued

On July 30, 2002, FASB issued SFAS No. 146, "Accounting for Costs Associated with Exit or Disposal Activities," SFAS No. 146 requires recognition of costs associated with exit or disposal activities when they are incurred rather than at the date of a commitment to an exit or disposal plan. SFAS No. 146 is to be applied prospectively to exit or disposal activities initiated after December 31, 2002. In the past, the Company has restructured from time to time, and this may occur in the future. All charges taken in the future will be expensed as incurred in accordance with SFAS No. 146.

SFAS No. 148, "Accounting for Stock-Based Compensation -Transition and Disclosure," which amends FASB Statement No. 123, "Accounting for Stock-Based Compensation," was issued in December 2002. This statement provides alternative methods of transition for a voluntary change to the fair value based method of accounting for stock-based employee compensation. In addition, SFAS No. 148 amends the disclosure requirements of SFAS No. 123 to require more prominent and more frequent disclosure in financial statements about the effects of stock-based compensation. The Company has chosen to account for stock-based compensation using the intrinsic value method prescribed by APB No. 25. The provisions of this statement are effective for fiscal years ended after December 15, 2002. Thus, the Company has adopted the disclosure provisions of SFAS No. 148 for the year ended December 31, 2002. As the adoption of this involves disclosures only, the Company does not expect a material impact on its financial position or results of operations.

In December 2002, FASB issued Financial Interpretation No. 45, "Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others." Financial Interpretation No. 45 elaborates on the existing disclosure requirements for most guarantees, including loan guarantees such as standby letters of credit. It also clarifies that at the time a company issues a guarantee, the company must recognize an initial liability for the fair value, or market value, of the obligations it assumes under that guarantee and must disclose that information in its interim and annual financial statements. Financial Interpretation No. 45 is to be applied prospectively to guarantees issued or modified after December 31, 2002. The disclosure requirements in this interpretation are effective for financial statements of interim or annual periods ending after December 31, 2002. The Company has adopted the disclosure provisions of FIN 45. Additionally, the recognition of a guarantor's obligation should be applied on a prospective basis to guarantees issued after December 31, 2002. The Company has yet determined the impact of adoption on its financial position, results of operations, or cash flows.

In January 2003, FASB issued Financial Interpretation No. 46, "Consolidation of Variable Interest Entities." Variable interest entities have been commonly referred to as special-purpose entities or off-balance sheet structures. The purpose of Financial Interpretation No. 46 is to improve financial reporting by enterprises involved with variable interest entities by requiring consolidation of such entities. Financial Interpretation No. 46

is to be applied immediately to variable interest entities created after January 31, 2003. The consolidation requirements apply to older entities in the first fiscal year or interim period beginning after June 15, 2003. Certain of the disclosure requirements apply in all financial statements issued after January 31, 2003, regardless of when the variable interest entity was established. The Company does not believe the adoption of this statement will have a material impact on its financial position, results of operations, or cash flows.

## 2 MERGERS AND ACQUISITIONS

2001 Acquisitions

On April 24, 2001, the Company acquired all of the outstanding common stock of Deschutes Corporation ("Deschutes"), a manufacturer of focused charged particle beam systems, in a transaction accounted for under the purchase method. Deschutes' results of operations are included in the consolidated financial statements for the period subsequent to April 24, 2001. The original purchase price of \$3,012 included \$650 of cash, 51 thousand shares of FEI common stock valued at \$1,279 and \$1,083 of liabilities assumed. In 2002, an additional \$400 was paid (consisting of 8 thousand shares of the Company's common stock, valued at \$200, and \$200 of cash) upon the meeting of milestones. The purchase price may be increased by an additional amount of up to \$200 (consisting of 4 thousand shares of the Company's common stock, valued at \$100, and \$100 of cash) if certain additional milestones are met.

On August 13, 2001, the Company purchased all of the assets and assumed certain liabilities of Surface/Interface, Inc. ("Surface/Interface"), a supplier of stylus nanoprofilometry systems, in a transaction accounted for under the purchase method. Activity of the Surface/Interface business is included in the consolidated financial statements for the period subsequent to August 13, 2001. The purchase price of \$12,365 included \$750 cash, 132 thousand shares of FEI common stock valued at \$5,009, the assumption of \$4,091 of Surface/Interface's liabilities and the Company's previous investment and advances to Surface/Interface of \$2,515. The Company's Chief Executive Officer and members of his family held an ownership interest in Surface/ Interface up to the date of the acquisition in August 2001.

For each of these acquisitions, management estimated the fair value of the intangible assets, inventory, and equipment acquired in order to allocate the total purchase price to the assets acquired and liabilities assumed. To determine the value of the technology and product lines acquired, management projected product revenues, gross margins, operating expenses, future research and development costs, income taxes and returns on requisite assets. The resulting operating income projections were discounted to a net present value. This approach was applied to existing technology as well as to research and development projects which had not yet been proven technologically feasible and which had not yet generated revenue at the date of the acquisition. For existing technology product lines, the discount rate used was 25 to 30 percent representing

management's estimate of the weighted average cost of capital for the acquired businesses. For research projects on products which had not yet been proven technologically feasible, the discount rate applied was 32 to 37 percent, reflecting the estimated equity cost of capital plus a premium for the risk and uncertainty associated with successful completion and market acceptance for such unproven products.

The existing technology is being amortized over its estimated useful life of five years. It is possible that estimates of anticipated future gross revenues, the remaining estimated economic life of products or technologies, or both, may be reduced due to competitive pressures or other factors. Management periodically evaluates the remaining economic useful lives and amortization periods for these intangible assets.

The total purchase price of Deschutes was allocated \$204 to current assets, \$28 to equipment, \$2,185 to existing technology, \$200 to goodwill and \$395 to in-process research and development. In estimating the value of purchased in-process research and development, the Company identified one significant project under development at the date of the acquisition. This project represents image engine technology that could be applied to certain of our existing FIB products and, if successful, would improve the performance and reliability of these products. This project had not been proven technologically feasible nor had it generated cost savings as of the date of the evaluation. In accordance with the Company's policy to expense research and development costs as they are incurred, a charge of \$395 associated with the write-off of acquired in-process research and development was recorded immediately subsequent to the closing of the acquisition. In estimating the value of existing technology, one existing product line was identified primarily for the data storage industry. This existing product line is currently generating revenue for the Company. As of December 31, 2002, the image engine project was complete. The total cost of the image engine project was approximately \$500 due to expanded scope and enhanced specifications for the project. The image engine project technology is now targeted for use in products expected to be shipped beginning in 2003.

The total purchase price of Surface/Interface was allocated \$327 to current assets, \$575 to equipment, \$315 to other assets, \$6,889 to existing technology, \$1,216 to goodwill and \$3,043 to in-process research and development. In estimating the value of purchased in-process research and development, the Company identified one significant project under development at the date of the acquisition. This project represents the development of a new metrology tool with wafer handling capability. This project had not been proven technologically feasible nor had it generated revenue as of the date of the evaluation. In accordance with the Company's policy to expense research and development costs as they are incurred, a charge of \$3,043 associated with the write-off of acquired in-process research and development was recorded immediately subsequent to the closing of the acquisition. In estimating the value of existing technology, two existing product lines were identified primarily for the semiconductor metrology market. The existing product lines are currently generating revenue for the Company.

As of December 31, 2002, the metrology tool project was complete, with initial product shipments expected in early 2003. The metrology tool project cost approximately \$1,500 to complete due to further design modifications related to a change in market direction and enhanced product specifications.

#### 2002 Acquisitions

On June 10, 2002, the Company purchased all of the assets and assumed certain liabilities of Atomika Instruments GmbH ("Atomika"), a supplier of secondary ion mass spectrometry equipment, in a transaction accounted for under the purchase method. Atomika was under bankruptcy protection at the time of the transaction. Activity of this business is included in the consolidated financial statements for the period subsequent to June 10, 2002. The purchase price of \$2,458 included \$974 cash, and the assumption of \$1,484 of liabilities. The total purchase price of these assets was allocated \$2,406 to current assets and \$52 to equipment. There were no intangible assets identified in the purchase price allocation for this asset purchase.

#### Purchased Technology and Goodwill

Purchased technology and goodwill consisted of the following:

following:				
	Amortization Period		Dec 2001	ember 31, <b>2002</b>
Existing technology from				•
PEO Combination, net of amortization of \$6,642				
and \$8,016, respectively	12 years	\$	9,848	\$ 8,474
Existing technology from				
Micrion acquisition, net of amortization of \$3,914 and				
\$5,542, respectively	10 years		12,363	10,735
Existing technology from other acquisitions, net of				
amortization of \$605				
and \$2,420, respectively	5 years		8,469	6,654
Purchased technology, net		<u>\$</u>	30,680	\$ 25,863
Goodwill from PEO				
Combination, net of				
amortization of \$5,614 and \$5,614, respectively	15 years*	\$	11,561	\$ 11,612
Goodwill from Micrion	10 / 1410	•	22,002	,
acquisition, net of amortization of \$4,558				
and \$4,558, respectively	12 years*		19,520	19,431
Goodwill from other	ŕ			
acquisitions	*		1,416	1,816
Goodwill, net		<u>\$</u>	32,497	\$ 32,859

<sup>\*</sup> Amortization was discontinued effective January 1, 2002 in accordance with SFAS No. 142.

Changes in goodwill from both the combination with the electron optics business of Philips (also referred to as the "PEO Combination") and the Micrion acquisition are the result of foreign currency fluctuations as a portion of the goodwill is recorded on the books of foreign subsidiaries. The increase in goodwill from other acquisitions is the result of the milestone payments made during 2002 for the Deschutes acquisition, as discussed above.

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#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Continued

In accordance with SFAS No. 142, the results for the years ended December 31, 2000 and 2001 have not been restated. A reconciliation of net income to pro forma net income as if SFAS No. 142 had been adopted January 1, 2000 is presented below.

000 i	is presen	ted	below.
	2000		2001
\$	13,311 3,150	\$	32,506 3,149
\$	16,461	\$	35,655
\$	0.47	\$	1.06
\$	0.59	\$	1.17
\$	0.45	\$	1.02
	0	\$	1.11
	\$ \$ \$ \$	\$ 13,311 3,150 \$ 16,461 \$ 0.47 \$ 0.59	\$ 13,311 \$ 3,150 \$ 16,461 \$ \$ 0.47 \$ \$ 0.59 \$ \$ 0.45 \$

Excluding the effects of any impairment or future acquisitions, the estimated amortization of existing technology for the next five years are \$4,817, \$4,817, \$4,817, \$4,211 and \$3,002 for the years ended December 31, 2003 through 2007, respectively.

### 3 INVESTMENTS IN MARKETABLE SECURITIES

Investments in marketable securities are classified as held-to-maturity based on the Company's intent and ability to hold them. As such, they are recorded at their amortized cost.

Short-term investments in marketable securities consisted of:

December 31,	2001		2002
Corporate notes and bonds	\$ 4,220	\$	47,142
Commercial paper	114,594		· -
Mortgage backed securities	-		7,034
Short-term investments in marketable securities	<u>\$ 118,814</u>	<u>s</u>	54,176

securities con	sisted of:
	2002
\$	45,318
	6,713
\$	52,031
	\$

Non-current investments at December 31, 2002 mature at varying dates through December 13, 2004.

#### 4 RECEIVABLES

Receivables consisted of the following:

December 31,	 2001	2002
Trade accounts receivable Allowance for doubtful accounts	\$ 84,420 (3,521)	\$ 92,407 (4,414)
Receivables, net	\$ 80,899	\$ 87,993

#### 5 INVENTORIES

Inventories consisted of the following:

2001	2002
\$ 37,006	\$ 35,867
7,247	10, <del>4</del> 04
24,253	30,449
18,604	17,724
87,110	94,444
(10,577)	(5,752)
\$ 76,533	\$ 88,692
	\$ 37,006 7,247 24,253 18,604 87,110 (10,577)

The Company disposed of inventory and charged the cost against the related excess and obsolescence reserve in the amount of \$2,273 during the year ended December 31, 2001 and \$7,599 during the year ended December 31, 2002.

### 6 PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment consisted of the following:

December 31,		2001		2002
Land	\$		\$	7,869
Buildings		-		9,037
Leasehold improvements	4	4,675		5,582
Machinery and equipment	28	3,923		36,437
Demonstration systems	20	5,196	3	34,047
Other fixed assets	1	1,193		13,017
	7(	),987	10	05,989
Accumulated depreciation	(36	5,461)	(4	49,287)
Total property, plant and				
equipment	\$ 34	1,526	\$ 5	56,702

On July 30, 2002, the Company purchased a 27-acre site and 180,000 square feet of office and manufacturing space in Hillsboro, Oregon.

### 7 OTHER ASSETS

Other assets consisted of the following:

December 31,		2001	2002
Service inventories, estimated			
non-current requirements, net of			
obsolescence reserves of \$9,686	<b>.</b>	17 201	e 04 =40
and \$11,146, respectively	\$	17,301	\$ 26,768
Capitalized software development			
costs, net of amortization of \$5,016			
and \$4,659, respectively		5,175	9,461
Debt issuance costs, net of			
amortization of \$350 and \$1,193,			
respectively		5,532	4,707
Patents, net of amortization of \$163			
and \$244, respectively		358	1,001
Investment in unconsolidated affiliates		-	1,115
Deposits and other		1,587	1,805
Total other assets	\$	29,953	\$ 44,857

The Company disposed of non-current service inventory and charged the cost against the related excess and obsolescence reserve in the amount of \$1,681 during the year ended December 31, 2001 and \$3,133 during the year ended December 31, 2002.

Software development costs capitalized during the years ended December 31, 2000, 2001 and 2002 were \$2,413, \$2,005 and \$5,767, respectively. Amortization of software development costs was \$1,748 in 2000, \$2,016 in 2001 and \$1,740 in 2002.

In September 1999, the Company purchased 1,232 shares of preferred stock in Surface/Interface for \$3,000 in cash. In June 2000, the Company purchased an additional 513 shares of preferred stock for \$1,250 in cash. In August 2001, the Company purchased all of the assets and assumed certain liabilities of Surface/Interface. As a result of the 2001 acquisition, the Company adjusted the carrying value of its previous investment in Surface/Interface to reflect the acquisition purchase price and recorded a valuation charge to earnings of \$3,718 in 2001.

Patents include amounts paid to Philips. See Note 16 for additional information.

In March 2002, the Company purchased 529 shares of Series B preferred stock and 226 warrants to purchase Series B preferred stock of Neocera, Inc., a start-up company that manufactures metrology equipment for the semiconductor manufacturing market. The total cost of the investment was \$990.

In October 2002, the Company invested \$125 in a start-up company owned by a former employee.

# 8 CREDIT FACILITIES

The Company maintains a \$10,000 unsecured and uncommitted bank borrowing facility in the U.S. and certain limited bank facilities in selected foreign countries. In addition, the Company maintains a \$5,000 unsecured and uncommitted bank facility in the U.S. and a \$3,132 unsecured and uncommitted bank facility in the Netherlands for the purpose of issuing standby letters of credit and bank guarantees. At December 31, 2002, the Company had outstanding standby letters of credit and bank guarantees totaling approximately \$1,450 to secure customer advance deposits under these bank facilities. The Company also had outstanding at December 31, 2002, \$8,879 of foreign bank guarantees that are secured by cash balances.

On August 3, 2001, the Company issued \$175 million of convertible subordinated notes, due August 15, 2008, through a private placement. The notes are redeemable at the Company's option beginning in 2004, or earlier if the price of the Company's common stock exceeds specified levels. The notes bear interest at 5.5%, payable semi-annually. The notes are convertible into common stock of the Company, at the note holder's option, at a price of \$49.52 per share.

### 9 LEASE OBLIGATIONS

Operations are conducted in manufacturing and administrative facilities under operating leases that extend through 2008. The lease agreements generally provide for payment of base rental amounts plus the Company's share of property taxes and common area costs. The leases generally provide renewal options at current market rates.

Rent expense is recognized on a straight-line basis over the term of the lease. Rent expense was \$4,998 in 2000, \$6,367 in 2001 and \$7,514 in 2002.

The approximate future minimum rental payments due under these agreements as of December 31, 2002 are \$7,730, \$6,769, \$5,553, \$4,540 and \$3,926 for the years ending December 31, 2003 through 2007, respectively, and \$1,761 thereafter.

### 10 warranty reserves

A reserve is established at the time of sale to cover estimated warranty costs and certain commitments for product upgrades, and is charged to cost of sales in the accompanying consolidated statements of operations. Costs incurred for warranty work are charged against the reserve. The following is a summary of warranty reserve activity:

marranty res	er re activity.				
	Balance, Beginning of Period	Increase to Reserve	Other Additions <sup>1</sup>	Warranty Costs Incurred	Balance, End of Period
Year ended December 31, 2000	<u>\$ 9,378</u> <b>\$</b>	12,501	<u>\$</u>	\$ (5,424) <b>\$</b>	16,455
Year ended December 31, 2001	\$ 16,455 \$	14,430	<u>\$</u>	<u>\$ (11,897)</u> <u>\$</u>	18,988
Year ended December 31, 2002	\$ 18,988 \$	18,124	\$ 509	\$ (21,522) \$	16,099

<sup>1</sup>Other additions in 2002 represent warranty reserves acquired with Atomika. See Note 2.

Our estimated warranty costs are reviewed and updated on a quarterly basis, which historically have not resulted in material adjustments to previous estimates.

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#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Continued

### 11 INCOME TAXES

Income tax expense on income before cumulative effect of change in accounting principle consisted of the following:

Year Ended December 31,	 2000		2001		2002
Current: Federal State Foreign	\$ 10,064 1,772 8,945	\$	11,141 2,982 8,187	\$	(2,821) (564) 9,802
Subtotal Deferred expense (benefit)	20,781 (6,708)		22,310 184		6,417 (1,427)
Total income tax expense	\$ 14,073	<u>\$</u>	22,494	\$_	4,990

The effective income tax rate applied to income before cumulative effect of change in accounting principle varies from the U.S. federal statutory rate due to the following:

the U.S. federal statutory rate due to the following:								
	2000		2001		2002			
\$	12,209	\$	19,250	\$	4,784			
	656		1,637		410			
	(957)		612		469			
	-		(1,985)		(1,273)			
	-		1,203		-			
	1,089		1,102		-			
	1,076		675		600			
\$	14,073	\$	22,494	\$	4,990			
		2000 \$ 12,209 656 (957) - 1,089 1,076	2000 \$ 12,209 \$ 656 (957) - 1,089 1,076	2000 2001  \$ 12,209 \$ 19,250  656 1,637  (957) 612  - (1,985)  - 1,203 1,089 1,102 1,076 675	2000 2001  \$ 12,209 \$ 19,250 \$  656 1,637 (957) 612  - (1,985)  - 1,203 1,089 1,102 1,076 675			

The tax effects of temporary differences that give rise to significant portions of deferred tax assets and deferred tax liabilities are as follows:

Deferred tax assets: Accrued liabilities Warranty reserves Inventory reserves	5,215 6,151 929	_	1,849 1,779 3,244
Warranty reserves	5,215 6,151 929	_	1,779
	6,151 929		•
Inventory reserves	929		3,244
mivemoty reserves			
Allowance for bad debts	404		868
Basis differences in investments	424		-
Net capital loss carryforwards	2,763		2,763
Revenue recognition	5,179		2,011
Net operating loss carryforwards	1,476		9,107
Foreign jurisdictions	1,533		2,511
Basis difference in equipment	53		1,516
Other assets	264		233
Gross deferred tax assets	24,563		25,881
Valuation allowance	(1,476)	)	(3,595)
Net deferred tax assets	23,087		22,286
Deferred tax liabilities:			
Capitalized software			
development costs	(246)	)	(1,466)
Existing technology and			
other intangibles	(8,727)	)	(6,726)
Foreign jurisdictions	(1,290)	)	(1,263)
Other liabilities	(24)	)	(1,458)
Total deferred tax liabilities	(10,287)	)	(10,913)
Net deferred tax asset \$	12,800	\$	11,373

The net change in the total valuation allowance for 2002 was an increase of \$2,119. The change in valuation allowance relates to the anticipation of the expiration of a capital loss carryforward in 2003 and an allowance for the estimated inability to utilize certain foreign net operating loss carryforwards. Net capital loss carryforwards of \$1,293 will expire in 2003 and \$1,470 will expire in 2006 if not utilized by the Company.

At December 31, 2002, the Company had approximately \$15,200 of net operating loss carryforwards to offset against future income for federal income tax purposes, which expire in 2022, \$10,400 for Oregon state income tax purposes, which expire in 2017, and approximately \$5,800 of foreign net operating loss carryforwards.

These deferred tax components are reflected in the consolidated balance sheet as follows:

December 31,		2001	2002
Deferred tax: Current asset Non-current liability		5,900 4,100)	\$ 18,934 (7,561)
Net deferred tax asset	\$ 12	2,800	\$ 11,373

As of December 31, 2002, U.S. income taxes have not been provided for approximately \$87,000 of cumulative undistributed earnings of several non-U.S. subsidiaries because the Company intends to reinvest these earnings indefinitely in operations outside the U.S. Foreign tax provisions have been provided for these cumulative undistributed earnings. Upon distribution of those earnings in the form of dividends or otherwise, the Company would be subject to both U.S. income taxes (subject to an adjustment for foreign tax credits) and withholding taxes payable to the various foreign countries. Determination of the amount of the unrecognized deferred U.S. income tax liability is not practicable because of the complexities associated with its hypothetical calculation.

The U.S. Internal Revenue Service ("IRS") recently completed an audit of the Company's federal income tax returns for the years 1997, 1998 and 1999. The outcome of the IRS audit did not have a material effect on the Company's financial position, results of operations or cash flows.

## 12 RESTRUCTURING AND REORGANIZATION

During the fourth quarter of 2002, in response to the continuing global economic downturn, the Company recorded restructuring and reorganization charges of \$5,529 related to its plan to consolidate operations, reduce excess leased facilities, and reduce operating expenses. Costs included in the charges consist of employee termination and other related costs, and facility and leasehold improvement charges related to future abandonment of various leased office and manufacturing sites in North America and Europe.

The plan, as of December 2002, included the removal of approximately 145 employees, or 9% of our worldwide work force. The positions affected include manufacturing, marketing, administrative, field service and sales personnel. During the fourth quarter of 2002, employees were informed of the headcount reduction plans and the related severance benefits they would be entitled to receive. Approximately 40% of the planned terminations were completed in the fourth quarter of 2002, and the remaining positions will be terminated throughout 2003: approximately 3%, 12%, 22% and 23%, in the first through fourth quarters of 2003, respectively. The positions remaining to be terminated as of December 31, 2002 primarily are located in the U.S. and Europe. For certain of the terminated employees in foreign countries, we are required to make continuing payments for a period of time after employment ends under existing employment laws and regulations.

Leasehold improvements and facilities represent ongoing contractual lease payments, less estimated proceeds from subleasing activities, and the remaining net book value of leasehold improvements for various buildings located in the U.S. and Europe. Lease costs and leasehold improvements for these facilities will be charged against the restructuring accrual on a monthly basis when the premises are vacated, until the lease contracts expire or the facilities are sub-leased. The Company expects to vacate these premises during 2003.

The above restructuring charges are based on estimates that are subject to change. Workforce related charges could change because of shifts in timing or changes in amounts of severance and outplacement benefits. Facilities charges could change because of changes in when we vacate the buildings or changes in sublease income. Our ability to generate sublease income, as well as our ability to terminate lease obligations at the amounts estimated, is dependent upon lease market conditions at the time we negotiate the lease termination and sublease arrangements.

The various components of the charge in the fourth quarter of 2002 were as follows:

Year Ended December 31, 2002:	harged to xpense	Settled	rrency slation	Ending Accrued Liability
Severance, outplacement and related benefits for terminated employees	\$ 3,660	\$ (467)	\$ 140	\$ 3,333
Leasehold improvements and facilities	1,869	-		1,869
Balance accrued as of December 31, 2002	\$ 5,529	\$ (467)	\$ 140	\$ 5,202

## 13 SHAREHOLDERS'

**CAPITAL STOCK** As of December 31, 2002, approximately 4.5 million shares of common stock were reserved for stock incentive plans.

On February 21, 1997, the Company acquired substantially all of the assets and liabilities of the electron optics business of Philips, in a transaction accounted for as a reverse acquisition. As part of the PEO Combination, the Company agreed to issue to Philips additional shares of common stock of the Company whenever stock options that were outstanding on the date of the closing of the PEO Combination are exercised. Any such additional shares are issued at a rate of approximately 1.22 shares to Philips for each share issued on exercise of these options. The Company receives no additional consideration for these shares issued to Philips under this agreement. The Company issued 22 thousand shares in 2001 and 189 thousand shares in 2002 to Philips under this agreement. As of December 31, 2002, 269 thousand shares of the Company's common stock are potentially issuable and reserved for issuance as a result of this agreement.

Continued

On May 22, 2001, the Company completed a public offering of 3.1 million shares of FEI common stock sold by the Company and 6.1 million shares of FEI common stock sold by Philips. Proceeds to the Company, net of underwriting discounts, commissions and offering expenses, totaled \$87,994. At completion of the offering, Philips' ownership of FEI common stock was reduced to approximately 8.1 million shares, or 25.6% of the total FEI common shares then outstanding, compared with 49.7% ownership prior to the offering.

On September 18, 2001 the Company announced a share repurchase program had been approved by the Board of Directors. The program allows the purchase of up to 2 million shares of the Company's common stock over a nine-month period ended June 18, 2002. During 2001, the Company repurchased and retired 50 thousand shares at a total cost of \$1,009. There were no shares repurchased during 2002.

STOCK INCENTIVE PLANS The Company maintains stock incentive plans for selected directors, officers, employees and certain other parties which allow the Board of Directors to grant options (incentive and nonqualified), stock and cash bonuses and stock appreciation rights and to sell restricted stock. The 1995 Stock Incentive Plan ("1995 Plan") allows for issuance of a maximum of 5 million shares. The 1995 Supplemental Stock Incentive Plan ("1995 Supplemental Plan") allows for issuance of a maximum of 500 thousand shares. The Board of Directors' ability to grant options under either the 1995 Plan or the 1995 Supplemental Plan will terminate, if the plans are not amended, when all shares reserved for issuance have been issued and all restrictions on such shares have lapsed or earlier, at the discretion of the Board of Directors. At December 31, 2002, there were 1.5 million shares available for grant under these plans.

Options are granted under various vesting arrangements, up to a maximum of five years. Options expire after a maximum of ten years. Options outstanding are summarized as follows:

	— Outsta Number of Shares	anding — Weighted Average Exercise Price	—— Exerc Number of Shares	isable — Weighted Average Exercise Price
Balance, December 31, 1999 Options granted Options exercised Options expired or cancelled	2,306 428 (389) (336)	\$ 7.66 23.14 8.36 7.86	679	\$ 7.78
Balance, December 31, 2000	2,009	10.79	574	7.40
Options granted Options exercised Options expired or cancelled	929 (211) (143)	27.69 7.96 12.58		
Balance, December 31, 2001	2,584	16.99	875	9.14
Options granted Options exercised Options expired or cancelled	790 (247) (156)	30.99 9.56 22.48		
Balance, December 31, 2002	2,971	\$ 21.04	1,190	\$ 12.68

Additional information regarding options outstanding as of December 31, 2002 is as follows:

		— Options Outstanding —		Options Exerc	isable
Range of Exercise Prices	Outstanding as of December 31, 2002	Weighted Average Remaining Contractual Life (years)	Weighted Average Exercise Price	Exercisable as of December 31, 2002	Weighted Average Exercise Price
\$6.63 - \$7.28	773	6.1	\$ 6.84	691	\$ 6.81
\$7.38 - \$23.88	843	7.4	17.96	328	16.05
\$24.50 - \$31.97	772	8.7	28.73	126	27.40
\$32.15 - \$40.33	583	8.9	34.16	45	37.09
	2,971	<u>7.7</u>	\$ 21.04	1,190	\$ 12.68

The weighted average fair value of options granted, as calculated under SFAS No. 123, was \$15.65 in 2000, \$18.50 in 2001 and \$19.56 in 2002.

EMPLOYEE SHARE PURCHASE PLAN In 1998 the Company implemented an Employee Share Purchase Plan ("ESPP"). Under the ESPP, employees may elect to have compensation withheld and placed in a designated stock subscription account for purchase of common stock of the Company. Each ESPP offering period consists of two consecutive six-month purchase periods. The purchase price in a purchase period is set at a fifteen percent discount of the lower of the market price on either the first day of the applicable offering period or the purchase date. If the fair market value of a share of stock on a purchase date (other than the final purchase date of an offering period) is less than the fair market value of a share stock on the offering date of the offering period, the offering period and purchase price are reset on the first business day subsequent to such purchase date. The ESPP allows a maximum purchase of 1 thousand shares by each employee during any 12-month offering period. During 2000, employees purchased 189 thousand shares at an average purchase price of \$7.43. During 2001, employees purchased 120 thousand shares at an average purchase price of \$17.18. During 2002, employees purchased 158 thousand shares at an average purchase price of \$17.79. At December 31, 2002, 484 thousand shares of common stock were reserved for issuance under the ESPP. The weighted average fair value in excess of the purchase price for ESPP shares purchased, as calculated under SFAS No. 123, was \$3.55 in 2000, \$9.73 in 2001 and \$10.37 in 2002. RESTRICTED STOCK AWARD AND PURCHASE On June 25, 1998, in connection with the commencement of his employment with FEI, Vahé Sarkissian, Chairman, President and Chief Executive Officer, was granted a stock bonus of 50 thousand shares of common stock of FEI. The stock was valued at \$7.41 per share, or \$370, the fair market value on the date of grant. 25 thousand shares of the stock bonus were subject to forfeiture if Mr. Sarkissian's employment as Chief Executive Officer of FEI terminated before June 25, 1999. Effective June 25, 1998, the Company loaned Mr. Sarkissian an amount equal to his federal and state tax liability for the stock bonus. This loan is forgiven at the rate of 20% annually if Mr. Sarkissian remains employed by the Company. The balance remaining on the loan at December 31, 2002 was \$11.

Also on June 25, 1998, in connection with the commencement of his employment, FEI sold to Mr. Sarkissian 151 thousand shares of common stock of FEI subject to specified restrictions. The purchase price for the shares was \$7.41, or \$1,116, the fair market value on the date of purchase. The restriction on these shares is removed at a rate of 20% on June 25, 1998 and an additional 20% annually thereafter through the year 2002. Effective June 25, 1998, FEI loaned Mr. Sarkissian the amount of \$1,116 for the purchase of these restricted shares.

**DISCLOSURE OF STOCK BASED COMPENSATION COSTS** The fair value of each option grant was estimated on the date of grant using the Black-Scholes option-pricing model with the following assumptions:

Year Ended December 31,	2000	2001	2002
Dividend yield	0.0%	0.0%	0.0%
Expected volatility (based on historical volatility)	78.3%	79.6%	73.0%
Weighted average risk-free interest rate	6.2%	4.6%	3.8%
Weighted average expected term	5.0 years	5.1 years	5.2 years

The fair value of ESPP shares was estimated at the start of each purchase period using the Black-Scholes option-pricing model with the following assumptions:

	U	1		
Year Ended December 31,		2000	2001	2002
Dividend yield		0.0%	0.0%	0.0%
Expected volatility (based				
on historical volatility)		78.3%	79.6%	<b>73.0</b> %
Weighted average risk-				
free interest rate		4.8%	2.2%	2.0%
Weighted average				
expected term		0.5 years	0.5 years	0.5 years

### 14 EARNINGS PER SHARE

The Company reports basic and diluted net income per share in accordance with SFAS No. 128, "Earnings per Share." The difference between basic and diluted net income per share is a result of the dilutive effect of outstanding stock options, which are considered potential common shares. The difference between the number of shares used in the calculation of basic and diluted net income per share is as follows:

Year Ended December 31,	2000	2001	2002
Weighted average shares outstanding - basic	28,091	30,563	32,493
Dilutive effect of stock options calculated using the treasury			
stock method	1,736	1,423	967
Weighted average shares outstanding – diluted	29,827	31,986	33,460

During the years ended December 31, 2000, 2001 and 2002, 139 thousand, 185 thousand and 1.5 million stock options have been excluded from the calculation of diluted earnings per share because their effect would be anti-dilutive. In addition, \$175,000 of convertible debt issued in 2001 can be converted into 3.5 million shares of the Company's stock, and these shares have been excluded from the calculation of diluted earnings per share because their effect would be anti-dilutive in both 2001 and 2002.

Continued

#### EMPLOYEE BENEFIT PLANS

PENSION PLANS Employee pension plans have been established in many foreign countries in accordance with the legal requirements and customs in the countries involved. The majority of employees in Europe, Asia and Canada are covered by defined benefit or defined contribution pension plans. Employees in the U.S. are not covered by pension plans. The benefits provided by these plans are based primarily on years of service and employees' compensation near retirement. The funding policy for the plans is consistent with local requirements in the countries of establishment.

Through August 31, 2001, certain of these pension plans were sponsored by Philips. The Company's share of the cost or benefit under these plans was determined by Philips and allocated to the Company. In certain countries the return on invested assets exceeded the cost of the benefit under these Philips pension plans, and the Company was allocated a portion of the pension income that Philips recognized. The Company's net pension benefit under these Philips sponsored pension plans was (\$1,576) in 2000 and (\$1,421) in 2001. Because the Company's employees represented less than 1% of the total active participants in these Philips plans, and because separate pension records are not maintained for each participating company, the Company did not account for its share of plan assets and obligations within the Philips sponsored plans.

Effective September 1, 2001, employees who previously participated in the Philips sponsored pension plans were transferred to other pension arrangements. Employees in the Netherlands began participating with other companies in making collectively-bargained payments to the Metal-Electro Industry pension fund. Pension costs relating to this multi-employer plan were \$1,142 for 2001 and \$2,946 for 2002. Employees in Europe outside the Netherlands are now covered through a defined contribution plan. Contributions to this plan for 2001 totaled \$18 and for 2002 were \$112.

In certain foreign countries, employees are covered by pension plans under local legal requirements. The total cost of these additional pension plans was \$437 in 2000, \$426 in 2001 and \$208 in 2002. These supplemental pension plans are not funded. A liability for the projected benefit obligations of these supplemental plans of \$1,064 and \$1,121 is included in other non-current liabilities as of December 31, 2001 and 2002, respectively.

POST-EMPLOYMENT BENEFITS OTHER THAN PENSIONS Most of the Company's employees in the Netherlands are provided group health insurance after retirement. Government based programs in the Netherlands provide this benefit after the normal retirement age of 65. Through December 31, 2002, for those employees that elected early retirement at age 62, the Company continues to provide the employer's portion of the health insurance premium until the normal retirement age of 65 is reached. Through August 31, 2001, these benefits in the Netherlands were generally provided under Philips sponsored

plans. Based on the number of the Company's employees located in the Netherlands, a charge of approximately \$25 each year was allocated to the Company by Philips. Effective September 1, 2001, the Company is responsible for providing these same post-retirement benefits for certain future early retirees of the Company in the Netherlands. During 2002, the Company expensed \$131 for this program. Effective January 1, 2003, the multi-employer plan was modified and accepted by the employees, and the Company will no longer be obligated to provide this benefit to employees retiring after December 31, 2002. PROFIT SHARE PLAN In 2000, the Company implemented a Profit Share Plan ("PSP") covering substantially all employees of the Company who are not already covered by an incentive compensation plan. The PSP pays employees a share of company profits on a semi-annual basis, subject to approval by the Company's Board of Directors. For 2000, 2001 and 2002, the total cost of the PSP was \$2,155, \$3,037 and \$1,627, respectively. PROFIT SHARING 401(K) PLAN The Company maintains a profit sharing 401(k) plan that covers substantially all U.S. employees. Employees may elect to defer a portion of their compensation, and the Company may contribute an amount approved by the Board of Directors. The Company matches 100 percent of employee contributions to the 401(k) plan up to one and one half percent of each employee's eligible compensation. In addition, a supplemental match may be approved by the Board of Directors, based on Company performance, up to a maximum of an additional three percent of eligible compensation. Employees must meet certain requirements to be eligible for the Company matching contribution. The Company contributed \$1,312 in 2000, \$1,553 in 2001 and \$753 in 2002 to this plan. The Company's 401(k) plan does not allow for the investment in shares of stock of FEI.

### 16 RELATED-PARTY

RELATIONSHIP WITH PHILIPS On February 21, 1997, FEI acquired substantially all of the assets and liabilities of the electron optics business of Philips in a transaction accounted for as a reverse acquisition. Philips received 55 percent of the then outstanding common stock of the Company in the exchange. Philips maintained majority control of FEI until May 22, 2001, when its ownership was reduced through a secondary public stock offering (see Note 13). The following paragraphs describe various business transactions and relationships between the Company and Philips.

AGREEMENT WITH PHILIPS EFFECTIVE AS OF DECEMBER 31, 2000 During 2001, the Company and Philips entered into an agreement effective as of December 31, 2000 (the "Supplemental Agreement") that clarifies certain relationships and transactions between the parties. Certain terms of the agreement became effective May 22, 2001, or 120 days after May 22, 2001, the day Philips' ownership fell below 45% of the Company's outstanding common stock. The agreement addresses, among other things, patents and intellectual property, research and development services, use of the Philips name and trademark, participation in Philips' insurance programs and the Philips

credit facility. Under the agreement, the Company no longer participates in certain Philips sponsored or administered programs. The Company continues to purchase certain of these services from Philips and certain other of these services are procured from other suppliers. The cost to procure these services from other suppliers and from Philips subsequent to May 22, 2001 is in excess of the amounts previously paid to Philips. Under terms of the Supplemental Agreement, Philips will pay up to \$6,000 to the Company over a three-year period to reduce the effect of these increased costs. Philips agreed to the payments as partial reimbursement of an over-funding of FEI's pension liability to the Philips pension plan that was not transferred to FEI at the time FEI employees transferred out of the Philips pension plan and as partial reimbursement for lost refunds FEI was previously receiving from the Philips plan due to the over-funding. These payments would terminate on a change of control of FEI, as defined in the agreement. During 2002 and 2001, the Company recognized payments totaling \$3,659 and \$1,351, respectively, as a reduction of operating expenses, and recognized increased operating expenses of approximately the same amount. The Company will recognize all future payments under the Supplemental Agreement as a reduction of operating expenses when the payments are received.

The Supplemental Agreement resolved a number of issues and transactions between the parties in anticipation of the reduction in Philips' ownership interest in the Company below 45%. In connection with the resolution of these issues, the Company reduced current accounts with Philips and common stock by \$5,000 to adjust the amount of division equity of the Philips electron optics business recorded at the original date of the PEO Combination. This division equity was originally recorded as common stock of FEI in the reverse acquisition accounting treatment of the PEO Combination.

MATERIALS PURCHASED FROM PHILIPS See Note 1. A substantial portion of the subassemblies included in the Company's FIBs, TEMs and SEMs are purchased from Philips Enabling Technologies Group. Materials purchases from Philips and its affiliates amounted to \$26,398 in 2000, \$32,080 in 2001 and \$27,790 in 2002.

PURCHASES UNDER PHILIPS ARRANGEMENTS AND TERMS From time to time, the Company purchased materials, supplies and services under collective purchase agreements and purchase conditions negotiated by Philips for the benefit of its group of companies. For this service, the Company paid a fixed annual fee amounting to \$127 in 2000 and \$111 in 2001. These arrangements generally ended after December 31, 2001. The Company also participated in certain business insurance programs under terms arranged by Philips through May 22, 2001. Effective May 23, 2001, the Company obtained its own independent business insurance. The benefits to the Company of these arrangements cannot be calculated precisely, but management believes that the costs of procuring these goods and services on a stand-alone basis are higher than the costs under the Philips arrangements.

EMPLOYMENT RELATED ARRANGEMENTS Through the majority shareholdings of Philips, the Company had the benefit of certain collective bargaining arrangements and the Philips rate for social charges in the Netherlands and other countries. Effective May 22, 2001, when Philips was no longer the majority shareholder, the Company negotiated new collective bargaining arrangements and a new social charge rate was applied to the Company, which resulted in increased labor costs for the Company. See also Note 15.

FACILITIES LEASED FROM PHILIPS The Company leases sales, service and administrative facilities from Philips in certain countries. The Company paid Philips approximately \$1,537 in 2000, \$1,392 in 2001 and \$623 in 2002 for rent of these facilities.

**DEVELOPMENT SERVICES PROVIDED BY PHILIPS** The Company purchases research and development services from Philips central research facility. The Company paid \$1,668 in 2000, \$3,208 in 2001 and \$2,494 in 2002 for such services.

INTELLECTUAL PROPERTY Prior to May 22, 2001, most of the patents used by the Company relating to its Electron Optics business segment products and certain Microelectronics business segment products were licensed from Philips and its affiliates. As part of the PEO Combination, the Company acquired perpetual rights to certain patents owned by Philips and the right to transfer of title of those patents upon Philips no longer being a controlling shareholder of FEI. The Supplemental Agreement confirmed the transfer of ownership of most of these patents to the Company. FEI paid \$19 to Philips for the transfer of such patents. The Supplemental Agreement specified certain other patents that are jointly owned and may be jointly used by Philips and FEI, and also provided for the license by FEI of certain patents owned by Philips. The Supplemental Agreement requires FEI to pay to Philips \$618 over three years in compensation for the development efforts related to a specific patented technology, which FEI may use in future products. FEI paid \$132 of this amount in 2001 and \$233 in 2002. FEI must also pay a royalty of 1% of sales on any future sales of products using this technology. To date, FEI has not sold any products using this technology or paid any related royalties. In addition, the Company had access to technology through cross-licenses between Philips affiliates and a large number of manufacturers in the electronics industry worldwide, and the Company's patents were also subject to such cross-licenses. Some of these cross-licenses provide the Company with the right to use intellectual property that relates to its core technologies. In general, these cross licenses were subject to continued majority ownership of the Company by Philips. The reduction below majority ownership by Philips, which occurred on May 22, 2001, could result in increased royalty costs or patent infringement actions and the costs associated with such claims, including direct costs as well as the diversion of management and technical resources.

Continued

OTHER SERVICES PROVIDED BY PHILIPS In connection with the PEO Combination, the Company entered into various services agreements with Philips affiliates to continue to provide to FEI certain administrative, accounting, customs, export, human resources, import, information technology, logistics and other services that had been provided to the Company since February 1997. The Company paid Philips approximately \$5,942 in 2000, \$4,504 in 2001 and \$1,109 in 2002 for these administrative and other services.

**CURRENT ACCOUNTS WITH PHILIPS** Current accounts with Philips represent accounts receivable and accounts payable between the Company and other Philips units. Most of the current account transactions relate to deliveries of goods, materials and services.

Current accounts with Philips consist of the following:

December 31,	2001	2002
Current accounts receivable Current accounts payable	\$ 5,945 (3,544)	\$ 252 (5,881)
Total current accounts with Philips	\$ 2,401	\$ (5,629)

**ACCUREL** The Company's Chief Executive Officer owns a 50 percent interest in Accurel Systems International Corp. ("Accurel"), a provider of metrology services to the semiconductor and data storage markets. The Company has sold equipment and services to Accurel, and has provided certain other services to Accurel.

During 2002, the Company sold three systems to Accurel for an aggregate of \$3,241, with extended payment terms of 5 years at 7% interest for one system, 3 years at 6.5% interest for another and 2 years at 10.43% for the third. These transactions were reviewed and approved by the Company's Board of Directors. The Company also provides service to Accurel on these and other systems purchased by Accurel. The Company has also guaranteed certain third party leases of Accurel, up to a maximum of \$500 as of December 31, 2002 (see Note 18).

**ATOS ORIGIN** The Company purchases information technology consulting and other services from Atos Origin, a company which is partially owned by Philips. Services purchased from Atos Origin totaled \$1.634 in 2000, \$2,767 in 2001 and \$2,492 in 2002.

SALES TO RELATED PARTIES Both Accurel and certain Philips business units purchased the Company's products and services for their own use. In addition, the Company has sold product and services to LSI Logic Corporation, whose chairman and chief executive officer serves on FEI's Board of Directors. Sales to Philips, Accurel and LSI Logic were:

1 /	•			
Year Ended December 31,		2000	 2001	2002
Product sales – Philips	\$	8,002	\$ 2,175	\$ 1,516
Product sales - Accurel		1,934	503	3,241
Product sales - LSI Logic		_	_	839
Total product sales		9,936	2,678	5,596
Service sales – Philips		1,516	903	14
Service sales – Accurel		465	509	396
Service sales - LSI Logic		32	137	121
Total service sales		2,013	1,549	531
Total revenues	\$	11,949	\$ 4,227	\$ 6,127

**CONSULTING AGREEMENT** During 2002, the Company paid \$98 to Shaunt Sarkissian, the son of FEI's President and Chief Executive Officer, under a consulting agreement entered into in January 2002.

STOCK PURCHASE LOAN On June 25, 1998, the Company loaned its Chairman, President and Chief Executive Officer, \$1,116 for the purchase of restricted stock. The loan was originally due June 25, 2002 and bore interest at a rate of 5.58%. Effective June 25, 2002, the Company's board of directors approved an amendment to the loan to extend the due date of the loan to June 25, 2005 and to increase the interest rate to 5.75%.

### 17 FAIR VALUE OF FINANCIAL INSTRUMENTS

Management believes the carrying amounts of cash and cash equivalents, receivables, current accounts with Philips, current receivable from Accurel, accounts payable and other current liabilities are a reasonable approximation of the fair value of those financial instruments because of the nature of the underlying transactions and the short-term maturities involved. Management classifies all marketable debt investments as "held to maturity" and therefore carries these financial instruments at amortized cost and not current fair value. The fair value of all marketable debt investments at December 31, 2002 was \$106.070, compared to the recorded cost of \$106,207. Based on the closing bid price, the fair market value of the convertible debt was \$147,000 as of December 31, 2002. The fair values of the Company's investments in unconsolidated affiliates are not readily determinable, as the securities are not actively traded.

International operations give rise to market risks from changes in foreign currency exchange rates. Forward exchange contracts are used to hedge a portion of the risk of foreign currency fluctuations. The Company's practice generally is to hold such hedge contracts to maturity. Because of the short-term maturities of these hedge contracts, management believes that the fair value of such contracts is not material. The counterparties to such transactions are major financial institutions. Accordingly, no provision for counter-party non-performance has been made. As of December 31, 2001 and 2002, the stated amount of forward exchange contracts outstanding totaled approximately \$30,866 and \$51,557, respectively, maturing at various dates through March 2003.

## 18 commitments and contingent liabilities

The Company is a party to litigation arising in the ordinary course of business. In the opinion of management, these actions will not have a material adverse effect, if any, on the Company's financial position, results of operations or cash flows.

The Company is self-insured for certain aspects of its property and liability insurance programs and is responsible for deductible amounts under most policies. The deductible amounts generally range from \$10 to \$250 per claim.

The Company participates in third party equipment lease financing programs with U.S. financial institutions for a small portion of products sold. In these circumstances, the financial institution purchases the Company's equipment and then leases it to a third party. Under these arrangements, the financial institutions have limited recourse against the Company on a portion of the outstanding lease portfolio if the lessee defaults on the lease. Under certain circumstances, the Company is

obligated to exercise best efforts to re-market the equipment, should the financial institutions reacquire it. As of December 31, 2002, the Company had guarantees outstanding under these lease financing programs, which totaled \$856, related to lease transactions entered into from 1998 through 2002.

The Company has commitments under non-cancelable purchase orders totaling \$2,962 at December 31, 2002, all of which expire in 2003.

See discussions of bank guarantees and debt repayments in Note 8, and operating leases in Note 9.

# 19 SEGMENT AND SIGNIFICANT CUSTOMER INFORMATION

The Company operates in four business segments. The Microelectronics segment manufactures and markets FIBs and DualBeam systems. Microelectronics segment products are sold primarily to the semiconductor and data storage markets, with additional sales to the industry and institute market. The Electron Optics segment manufactures and markets SEMs and TEMs. Electron Optics products are sold in the industry and institute market to materials and life sciences customers, as well as in the semiconductor and data storage markets. The Components segment manufactures and markets electron and ion emitters, focusing columns and components thereof. These components are used in the Company's FIB, DualBeam, SEM and TEM systems and are also sold to other microscope manufacturers. The Service segment services the Company's worldwide installed base of products, generally under service contracts. See also Note 1.

The following table summarizes various financial amounts for each of the Company's business segments:

	Micro- electronics	Electron Optics	Components	Service	Corporate and Eliminations	Total
2000:						
Sales to external customers	147,307	107,982	18,277	46,734	_	320,300
Inter-segment sales	1,019	5,588	5,690	_	(12,297)	
Total sales	148,326	113,570	23,967	46,734	(12,297)	320,300
Gross profit	77,451	42,960	9,513	8,113	(915)	137,122
Depreciation & amortization	5,906	3,312	985	1,658	6,418	18,279
Operating income (loss)	31,554	8,312	6,463	2,912	(12,721)	36,520
Total assets	96,030	83,086	12,347	31,291	92,069	314,823
2001:						
Sales to external customers	168,482	136,720	15,317	55,485	_	376,004
Inter-segment sales	1,153	7,739	7,946	´ -	(16,838)	,
Total sales	169,635	144,459	23,263	55,485	(16,838)	376,004
Gross profit	96,204	65,794	7,788	12,606	-	182,392
Depreciation & amortization	8,461	3,795	1,145	1,062	7,935	22,398
Operating income (loss)	39,095	29,699	2,801	3,975	(16,496)	59,074
Total assets	95,855	94,143	8,015	44,520	364,943	607,476
2002:						
Sales to external customers	128,549	134,700	10,328	67,804	_	341,381
Inter-segment sales	3,621	24,112	6,549	· -	(34,282)	
Total sales	132,170	158,812	16,877	67,804	(34,282)	341,381
Gross profit	68,601	54,664	5,360	21,188	-	149,813
Depreciation & amortization	8,133	3,478	1,278	1,070	7,269	21,228
Operating income (loss)	12,405	17,508	1,404	12,516	(25,219)	18,614
Total assets	116,423	113,087	6,682	57,299	346,925	640,416

Continued

Inter-segment sales are shown at cost, with no markup for gross profit within the selling segment, and are eliminated in consolidation. Corporate administration expenses, amortization of purchased goodwill and technology, charges for inprocess research and development, merger costs, and restructuring and reorganization costs are not allocated to the Company's business segments. Assets that cannot be assigned to a specific segment are shown as corporate assets, including purchased goodwill and technology.

The Company's long-lived assets were geographically located as follows:

December 31,	2001	2002
U.S.	\$ 106,240	\$ 132,135
The Netherlands	11,979	18,955
Other	9,437	11,429
Total	\$ 127,656	\$ 162,519

The following table summarizes sales by geographic region:

	. North America	Europe	Asia Pacific	Other	Total
2000:					····
Product sales to customers	\$ 113,080	\$ 73,253	\$ 86,523	\$ 710	\$ 273,566
Service sales to customers	24,637	14,528	7,472	97	46,734
Total sales	\$ 137,717	\$ 87,781	\$ 93,995	\$ 807	\$ 320,300
2001:					
Product sales to customers	\$ 132,707	\$ 101,856	\$ 85,953	\$ -	\$ 320,516
Service sales to customers	30,480	17,102	7,906		55,488
Total sales	<u>\$ 163,187</u>	\$ 118,958	\$ 93,859	<u>s – </u>	\$ 376,004
2002:				<del></del>	
Product sales to customers	\$ 106,161	\$ 84,888	\$ 82,528	\$ -	\$ 273,577
Service sales to customers	36,430	20,207	11,167	-	67,804
Total sales	\$ 142,591	\$ 105,095	\$ 93,695	\$	\$ 341,381

Sales to customers in the U.S. were \$135,054 in 2000, \$160,114 in 2001 and \$138,866 in 2002. Sales to customers in Japan were \$39,287 in 2000, \$46,499 in 2001, and \$35,246 in 2002. Sales to no other country represented 10% or more of total sales in 2000, 2001 or 2002.

### 20 PROPOSED MERGER WITH VECO INSTRUMENTS INC.

On July 11, 2002, FEI entered into an Agreement and Plan of Merger (the "Merger Agreement") by and among Veeco Instruments Inc. ("Veeco"), Venice Acquisition Corp., a whollyowned subsidiary of Veeco, and FEI. Pursuant to the Merger

Agreement, Venice Acquisition Corp. would merge with and into FEI, with the result that FEI would be the surviving corporation and would become a wholly-owned subsidiary of Veeco. On January 9, 2003, Veeco and FEI jointly announced that they would not proceed with the merger due to the difficult overall market and economic conditions, and the uncertain timing of an industry recovery. During 2002, \$6,839 of legal, accounting and investment banking costs were incurred and expensed in connection with the proposed Veeco merger.

#### INDEPENDENT AUDITORS' REPORT

### To the Board of Directors and Shareholders of FEI Company Hillsboro, Oregon

We have audited the accompanying consolidated balance sheets of FEI Company and subsidiaries as of December 31, 2002 and 2001, and the related consolidated statements of operations, comprehensive income, shareholders' equity, and cash flows for each of the three years in the period ended December 31, 2002. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such consolidated financial statements present fairly, in all material respects, the financial position of FEI Company and subsidiaries as of December 31, 2002 and 2001, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2002, in conformity with accounting principles generally accepted in the United States of America.

As discussed in Note 1 to the consolidated financial statements, the Company implemented Securities and Exchange Commission Staff Accounting Bulletin No. 101, Revenue Recognition in Financial Statements, effective January 1, 2000 and adopted Statement of Financial Accounting Standards No. 142, Goodwill and Other Intangible Assets, effective January 1, 2002.

DELOITTE & TOUCHE LLP

Deloitte + Touche LLP

Portland, Oregon February 10, 2003

### MARKET FOR THE COMPANY'S COMMON EQUITY AND RELATED SHAREHOLDER MATTERS

Our common stock is traded on the Nasdaq National Market under the symbol "FEIC." The following table sets forth, for the periods indicated, the high and low bid prices for our common stock, as reported by the Nasdaq Stock Market's National Market:

High	Low
30.13	16.63
43.41	17.50
41.70	17.75
36.00	20.52
38.41	25.10
35.98	21.06
27.16	13.70
19.57	12.34
	30.13 43.41 41.70 36.00 38.41 35.98 27.16

As of March 17, 2003 there were approximately 118 holders of record of our common stock. We believe the number of beneficial owners is substantially greater than the number of record holders because a large portion of our outstanding common stock is held of record in broker "street names" for the benefit of individual investors.

In February 1997 we combined with the electron optics business of Koninklijke Philips Electronics N.V., or Philips, pursuant to a combination agreement between FEI and a subsidiary of Philips. As part of the combination, we agreed to issue to Philips additional shares of our common stock when

stock options that were outstanding on the date of the closing of the combination (February 21, 1997) are exercised. Any such additional shares are issued at a rate of approximately 1.22 shares to Philips for each share issued on exercise of these options. During fiscal years 2001 and 2002, we issued 22,317 and 188,841 shares of our common stock to Philips in connection with this agreement. The shares issued were not registered under the Securities Act of 1933, and the issuance was made in reliance on Section 4(2) of the Securities Act of 1933 as a transaction not involving a public offering. The consideration we received for the shares issued, together with the shares issued to Philips at the combination closing, was the outstanding shares of Philips Electron Optics International B.V. and Philips Electron Optics, Inc. As of December 31, 2002, 268,841 shares of our common stock remain issuable under this agreement.

In connection with our December 1999 acquisition from Philips of sales, distribution and service operations in 19 countries, we paid cash consideration of approximately \$3.3 million, which was treated as a dividend to Philips for financial accounting purposes because the transaction was among parties under common control. Other than the payment of this acquisition consideration to Philips, we have never declared or paid cash dividends on our common stock. We intend to retain any earnings for use in our business and, therefore, do not anticipate paying any cash dividends in the foreseeable future.

#### CORPORATE INFORMATION

#### **BOARD OF DIRECTORS**

Vahé A. Sarkissian (1998) Chairman, President and Chief Executive Officer

Dr. Michael J. Attardo (1999) Retired General Manager Microelectronics Division IBM Corporation

Wilfred J. Corrigan (2002) Chairman and Chief Executive Officer LSI Logic

William E. Curran (1997)
 Executive Vice President
 Philips Medical Systems

Dr. William W. Lattin (1999) Retired Executive Vice President Synopsys, Inc.

Jan C. Lobbezoo (1999) Executive Vice President and Chief Financial Officer Philips Semiconductors International B.V.

Dr. Gerhard H. Parker (2001) Retired Executive Vice President Intel Corporation

Donald R. VanLuvanee (1995) Retired President and Chief Executive Officer Electro Scientific Industries, Inc.

### EXECUTIVE MANAGEMENT TEAM

Vahé A. Sarkissian Chairman, President and Chief Executive Officer

Dr. Steven D. Berger Senior Vice President Chief Technical Officer

Wade Clowes Vice President Manufacturing

John A. Doherty Senior Vice President Global Sales Michel Epsztein Senior Vice President, General Manager MicroElectronics Division

Dr. Rob H. J. Fastenau Senior Vice President General Manager Electron Optics Product Division

Jim D. Higgs Senior Vice President Human Resources

Bruno Janssens Vice President Sales/Service Division Europe

Dr. John M. Lindquist Senior Vice President Corporate Marketing and Strategic Development

Stephen F. Loughlin Vice President of Finance Corporate Controller and Acting Chief Financial Officer

Dr. David Narum Vice President, General Manager Beam Technology Division

David M. O'Brien Senior Vice President Chief Information Officer

Paul J. O'Mara Vice President Global Service

Bradley J. Thies Vice President, General Counsel and Secretary

### REGIONAL SALES EXECUTIVES

Ken Daidohji Vice President of Sales Japan

Daniel Ma Vice President of Sales Asia Pacific

Vahan Tchakerian Vice President of Sales North America

#### SHAREHOLDERS MEETING

The Annual Shareholders Meeting will be held at 9:00 AM PDT on Thursday, May 15, 2003 at FEI's new World Campus located at 5350 NE Dawson Creek Drive, Hillsboro, Oregon.

### EXCHANGE AND STOCK MARKET LISTING

Nasdaq Stock Market Stock Symbol: FEIC

### TRANSFER AGENT AND REGISTRAR

Mellon Investor Services LLC 85 Challenger Road Ridgefield Park, NJ 07660 +1 800 610 3775

#### LEGAL COUNSEL

Wilson Sonsini Goodrich & Rosati 650 Page Mill Road Palo Alto, CA 94304-1050

#### INDEPENDENT AUDITORS

Deloitte & Touche, LLP 111 S.W. Fifth Avenue Suite 3900 Portland, OR 97204

#### CONTACT INFORMATION

FEI Company 7451 N.W. Evergreen Parkway Hillsboro, OR 97124-5830 Phone: +1 503 640 7500 Website: www.feicompany.com

